

LAMPIRAN – A
CITRA HASIL PERCOBAAN

1. Citra Hasil Watermarking

| Nama Citra | Citra Asli | Citra yang Telah Disisipkan Watermark | Watermark Asli dan Watermark Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

2. Contoh Citra yang Telah Disisipkan *Watermark* dan Dikompres

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Dikompres Dengan $Q = 0$ | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Dikompres Dengan $Q = 3$ | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Dikompres Dengan $Q = 5$ | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

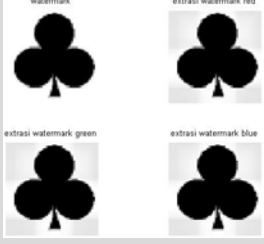
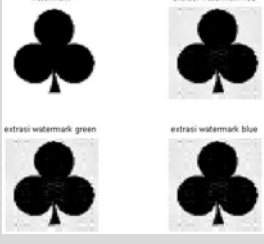
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Dikompres Dengan $Q = 10$ | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

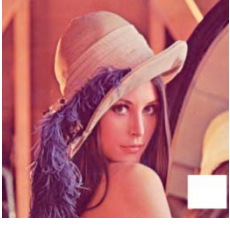
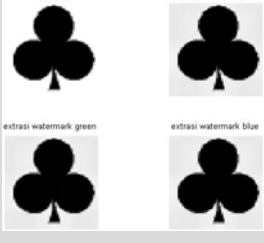
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Dikompres Dengan $Q = 12$ | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

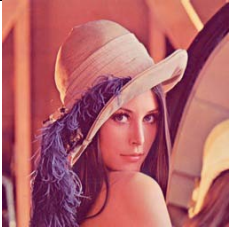
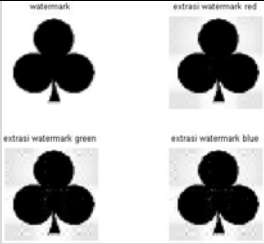
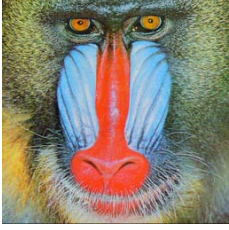
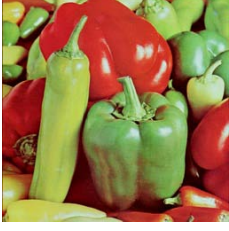

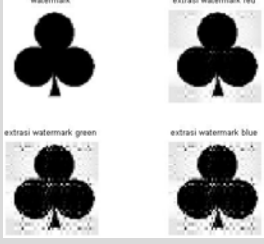
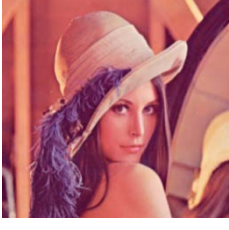
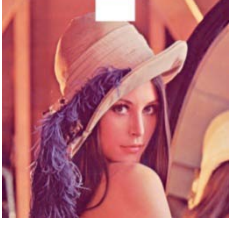
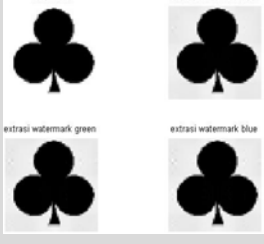

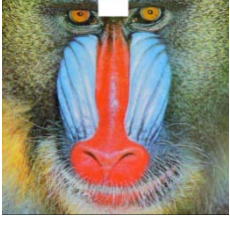
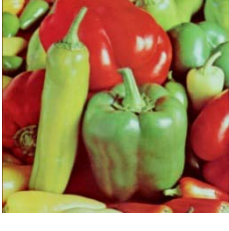

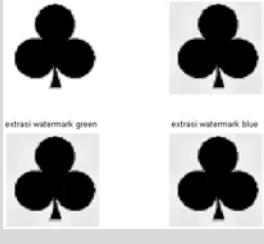
3. Contoh Citra Yang Telah Disisipkan *Watermark* dan di *Cropping*

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Crop</i> Bagian Kiri Atas | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|--|---|--|
| Lena 256 | | | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p> <p>extraksi watermark green</p> </div> <div style="text-align: center;"> <p>extraksi watermark red</p> <p>extraksi watermark blue</p> </div> </div> |
| Baboon 256 | | | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p> <p>extraksi watermark green</p> </div> <div style="text-align: center;"> <p>extraksi watermark red</p> <p>extraksi watermark blue</p> </div> </div> |
| Pepper 256 | | | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p> <p>extraksi watermark green</p> </div> <div style="text-align: center;"> <p>extraksi watermark red</p> <p>extraksi watermark blue</p> </div> </div> |
| Lena 512 | | | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p> <p>extraksi watermark green</p> </div> <div style="text-align: center;"> <p>extraksi watermark red</p> <p>extraksi watermark blue</p> </div> </div> |
| Baboon 512 | | | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p> <p>extraksi watermark green</p> </div> <div style="text-align: center;"> <p>extraksi watermark red</p> <p>extraksi watermark blue</p> </div> </div> |
| Pepper 512 | | | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p> <p>extraksi watermark green</p> </div> <div style="text-align: center;"> <p>extraksi watermark red</p> <p>extraksi watermark blue</p> </div> </div> |

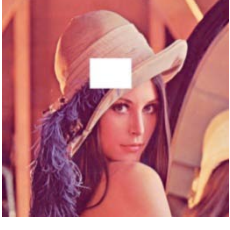
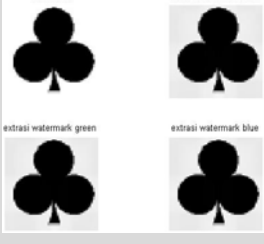
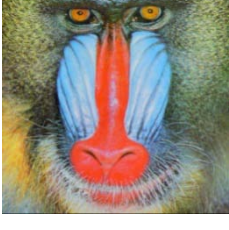
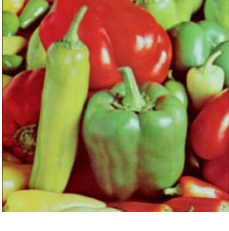
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Crop</i> Bagian Kanan Atas | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Crop</i> Bagian Kiri Bawah | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |



| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Crop</i> Bagian Kanan Bawah | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Crop</i> Bagian Tengah Atas | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Crop</i> Bagian Tengah Bawah | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Crop</i> Bagian Tengah | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

4. Contoh Citra yang Telah Disisipkan *Watermark* dan Di *Scaling*



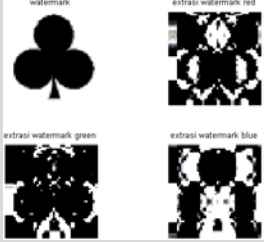
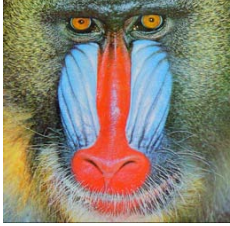

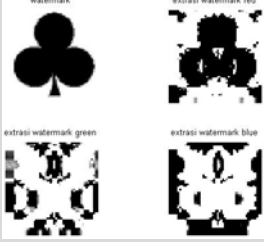


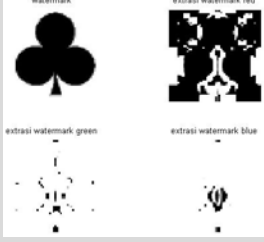
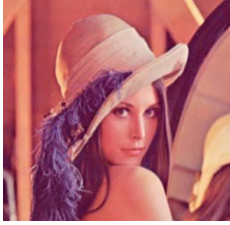
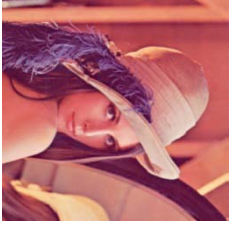
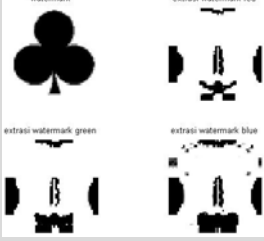
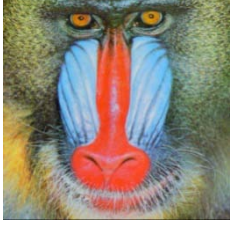

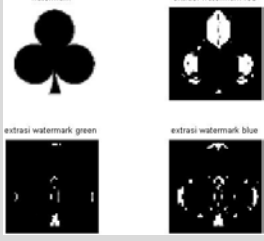


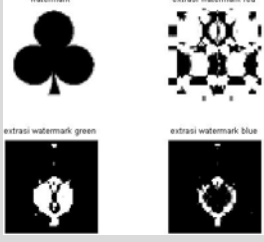
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Scaling</i> 1.5x | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

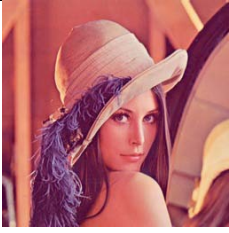
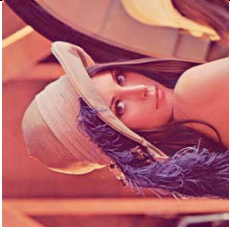
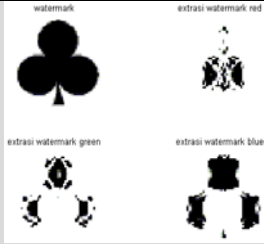
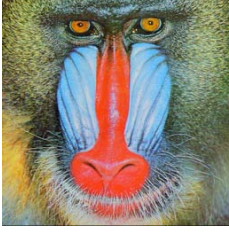

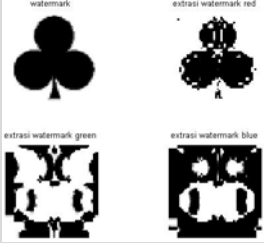
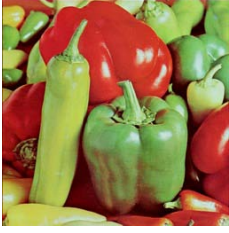

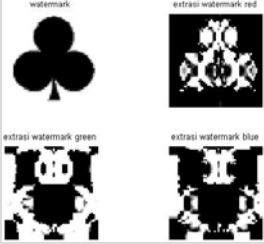
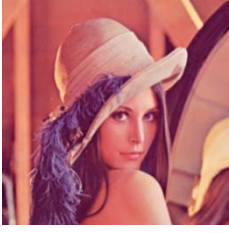
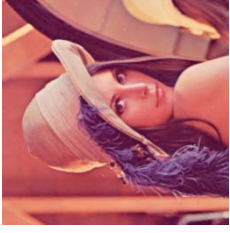
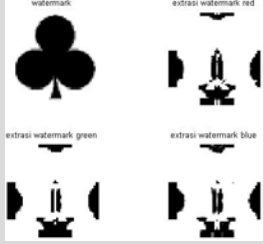
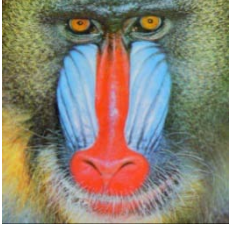

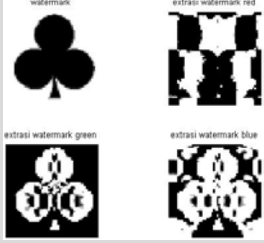
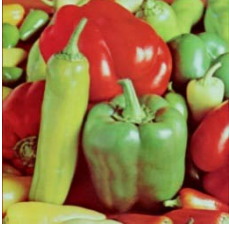

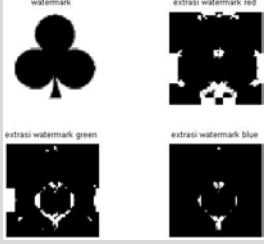
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Scaling 2x</i> | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

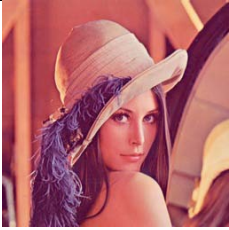
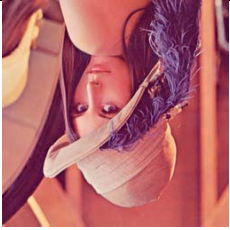
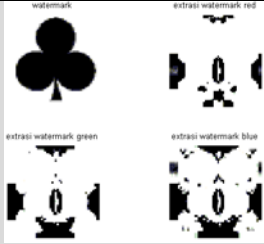
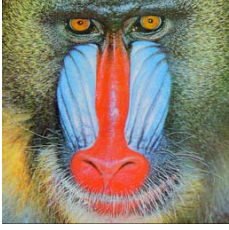

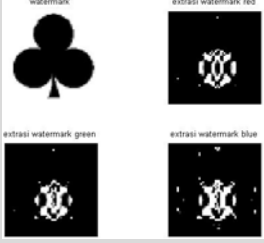


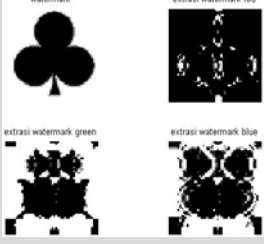
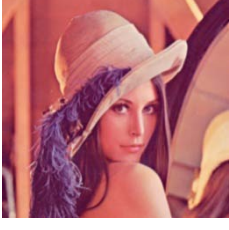
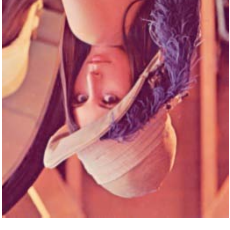
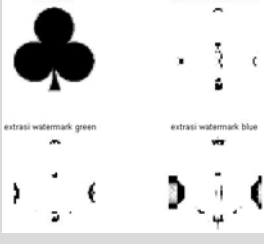
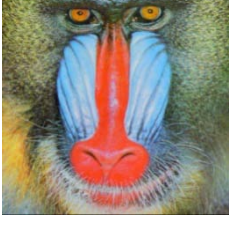

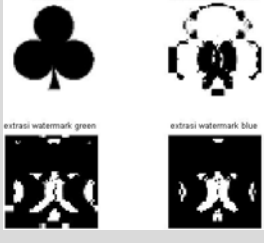
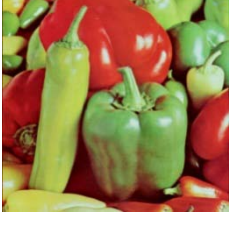

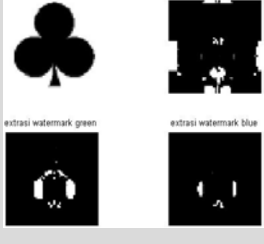
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Scaling</i> 0.25x | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Scaling 0.5x</i> | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

5. Contoh Citra yang Telah Disisipkan *Watermark* dan di *Rotate*



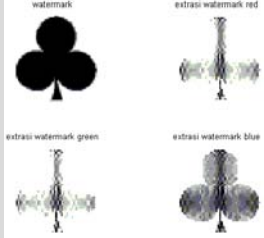
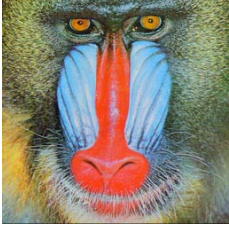

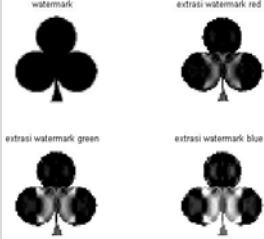
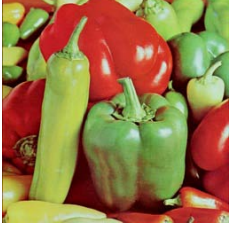

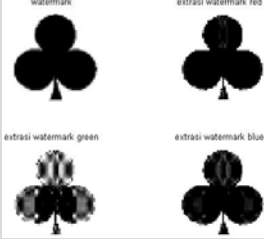
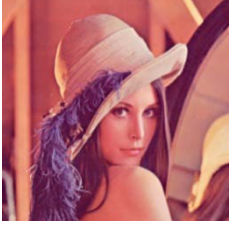
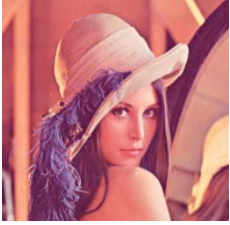
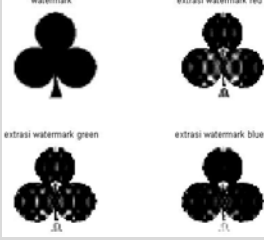


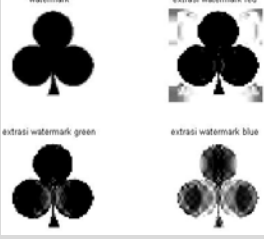


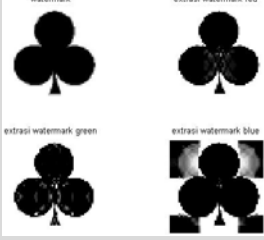
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate</i> 90° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

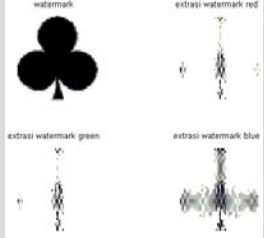
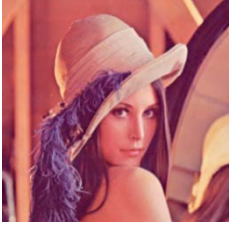
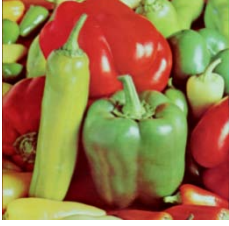
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate -90°</i> | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate 180°</i> | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

6. Contoh Citra yang Telah Disisipkan *Watermark* dan Di *Rotate Scaling*

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate Scaling</i> Dengan Sudut 0.25° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |


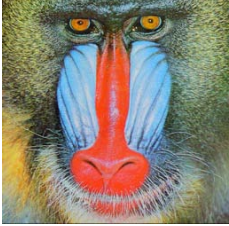

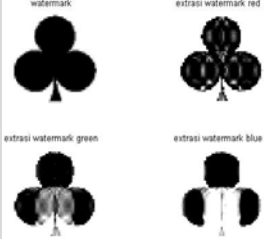
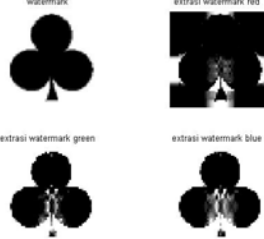
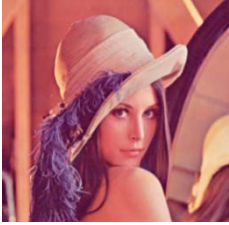
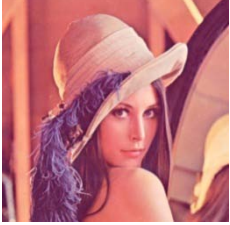
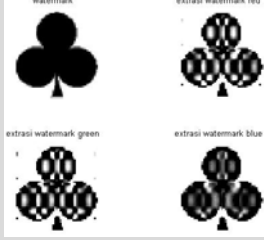

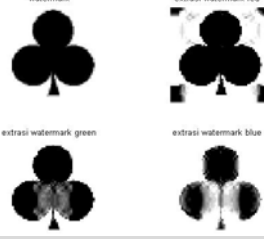

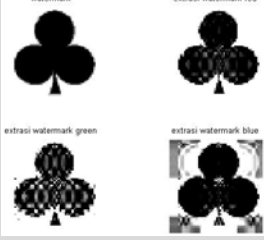
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate Scaling</i> Dengan Sudut 0.5° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |


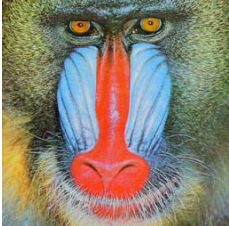

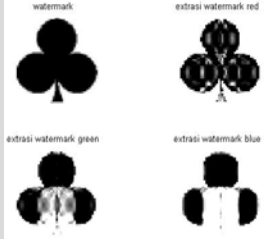


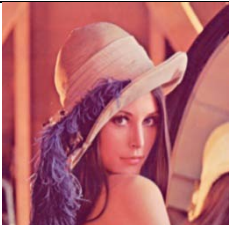


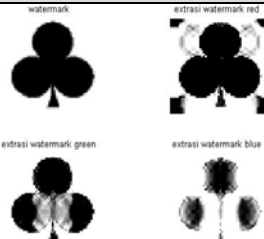
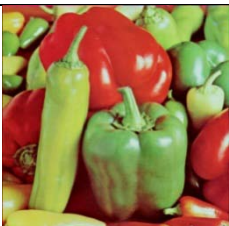
| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate Scaling</i> Dengan Sudut 0.75° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate Scaling</i> Dengan Sudut 1° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate Scaling</i> Dengan Sudut -0.25° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |


| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate Scaling</i> Dengan Sudut -0.5° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

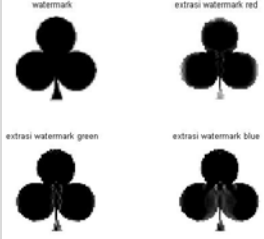

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate Scaling</i> Dengan Sudut -0.75° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah di <i>Rotate Scaling</i> Dengan Sudut -1° | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

7. Contoh Citra yang Telah Disisipkan *Watermark* dan di *Filter*

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Di <i>Median Filtering</i> dengan Mask 3x3 | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Di <i>Median Filtering</i> dengan Mask 5x5 | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Di <i>Median Filtering</i> dengan Mask 7x7 | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

8. Contoh Citra yang Telah Disisipkan *Watermark* dan Diberi *Noise*

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Diberi <i>Noise</i> Dengan SNR 0dB | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Diberi <i>Noise</i> Dengan SNR 5dB | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Diberi <i>Noise</i> Dengan SNR 10dB | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Diberi <i>Noise</i> Dengan SNR 15dB | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |

| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Diberi <i>Noise</i> Dengan SNR 20dB | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |


| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Diberi <i>Noise</i> Dengan SNR 25dB | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|--|
| Lena 256 |  |  | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p>  <p>extraksi watermark green</p>  </div> <div style="text-align: center;"> <p>extraksi watermark red</p>  <p>extraksi watermark blue</p>  </div> </div> |
| Baboon 256 |  |  | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p>  <p>extraksi watermark green</p>  </div> <div style="text-align: center;"> <p>extraksi watermark red</p>  <p>extraksi watermark blue</p>  </div> </div> |
| Pepper 256 |  |  | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p>  <p>extraksi watermark green</p>  </div> <div style="text-align: center;"> <p>extraksi watermark red</p>  <p>extraksi watermark blue</p>  </div> </div> |
| Lena 512 |  |  | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p>  <p>extraksi watermark green</p>  </div> <div style="text-align: center;"> <p>extraksi watermark red</p>  <p>extraksi watermark blue</p>  </div> </div> |
| Baboon 512 |  |  | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p>  <p>extraksi watermark green</p>  </div> <div style="text-align: center;"> <p>extraksi watermark red</p>  <p>extraksi watermark blue</p>  </div> </div> |
| Pepper 512 |  |  | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>watermark</p>  <p>extraksi watermark green</p>  </div> <div style="text-align: center;"> <p>extraksi watermark red</p>  <p>extraksi watermark blue</p>  </div> </div> |


| Nama Citra | Citra yang Telah Disisipkan <i>Watermark</i> | Hasil Citra Setelah Diberi <i>Noise</i> Dengan SNR 30dB | <i>Watermark</i> Asli dan <i>Watermark</i> Hasil Ekstraksi |
|------------|---|---|---|
| Lena 256 |  |  |  |
| Baboon 256 |  |  |  |
| Pepper 256 |  |  |  |
| Lena 512 |  |  |  |
| Baboon 512 |  |  |  |
| Pepper 512 |  |  |  |


LAMPIRAN – B

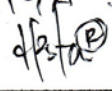
DATA MOS

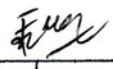
1. **Kualitas Citra Setelah Disisipi Watermark**

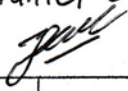
| Nama : Shyeron | | | | | |
|--|---|---|---|---|---|
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | | ✓ | | | |
| Baboon 512 | | ✓ | | | |
| Pepper 512 | ✓ | | | | |


| Nama : Dian R | | | | | |
|--|---|---|---|---|---|
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |

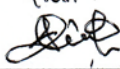
| Nama : Budi R | | | | | |
|--|---|---|---|---|---|
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | ✓ | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |


| | | | | | |
|--|---|---|---|---|---|
| Nama : I TA ROSITA | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | ✓ | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | ✓ | | | |
| Lena 512 | | ✓ | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |


| | | | | | |
|--|---|---|---|---|---|
| Nama : Fransiskus Setiawan | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | ✓ | | | |
| Baboon 256 | | ✓ | | | |
| Pepper 256 | | ✓ | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | | ✓ | | | |

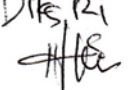
| | | | | | |
|--|---|---|---|---|---|
| Nama : Daniel Sutanto | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | | ✓ | | | |
| Pepper 256 | | ✓ | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | | ✓ | | | |
| Pepper 512 | | ✓ | | | |

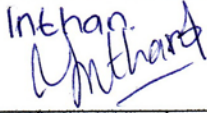
| | | | | | |
|--|---|---|---|---|---|
| Nama : HANIKY | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | | ✓ | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |


| | | | | | |
|--|---|---|---|---|---|
| Nama : Diana | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |


| | | | | | |
|--|---|---|---|---|---|
| Nama : Berlian . C | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | ✓ | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |


| | | | | | |
|--|---|---|---|---|---|
| Nama : Yeni | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | ✓ | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | | ✓ | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |

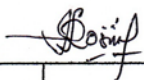
| | | | | | |
|--|---|---|---|---|---|
| Nama : Dikri | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |

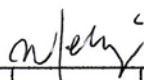
| | | | | | |
|--|---|---|---|---|---|
| Nama : Inchan | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |


| Nama : Sherly Kristiani | | | | | |
|--|---|---|---|---|---|
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |

| Nama : CARDIMAN | | | | | |
|--|---|---|---|---|---|
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |

| Nama : Mariana | | | | | |
|--|---|---|---|---|---|
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | | ✓ | | |
| Baboon 256 | | | ✓ | | |
| Pepper 256 | | ✓ | | | |
| Lena 512 | | | ✓ | | |
| Baboon 512 | ✓ | ✓ | | | |
| Pepper 512 | ✓ | | | | |

| | | | | | |
|--|---|---|---|---|---|
| Nama : RAMDAN | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |

| | | | | | |
|--|--------------|--------------|---|---|---|
| Nama : WENGEU | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | | ✓ | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | | ✓ | | | |
| Pepper 512 | ✓ | | | | |

| | | | | | |
|--|---|---|---|---|---|
| Nama : Tia ^{RIV} | | | | | |
| Tanda tangan :  | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | ✓ | | | | |
| Baboon 256 | | ✓ | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |

| Nama : <i>Indranto</i> | | | | | |
|--------------------------------|---|---|---|---|---|
| Tanda tangan : <i>Indranto</i> | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | ✓ | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | ✓ | | | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | ✓ | | | | |

| Nama : <i>WIRA</i> | | | | | |
|----------------------------|---|---|---|---|---|
| Tanda tangan : <i>Wira</i> | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | ✓ | | | |
| Baboon 256 | ✓ | | | | |
| Pepper 256 | | ✓ | | | |
| Lena 512 | | | ✓ | | |
| Baboon 512 | ✓ | | | | |
| Pepper 512 | | ✓ | | | |

| Nama : <i>Legani</i> | | | | | |
|------------------------------|---|---|---|---|---|
| Tanda tangan : <i>Legani</i> | | | | | |
| Gambar | 5 | 4 | 3 | 2 | 1 |
| Lena 256 | | | ✓ | | |
| Baboon 256 | | ✓ | | | |
| Pepper 256 | ✓ | | | | |
| Lena 512 | | ✓ | | | |
| Baboon 512 | | ✓ | | | |
| Pepper 512 | ✓ | | | | |

2. Penilaian Watermark Hasil Ekstraksi

- Kompresi JPEG

| | | |
|-------------------------------------|---------|-------------|
| Nama | : Mario | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|--------|-------------|
| Nama | : Gelo | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------|-------------|
| Nama | : Cella | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|--------|-------------|
| Nama | : Pity | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------|-------------|
| Nama | : annie | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|------------------|-------------|
| Nama | : Yohanes Tedina | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|-------------|-------------|
| Nama | : Daniel Lo | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|----------|-------------|
| Nama | : R-fena | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|--------|-------------|
| Nama | : IMAS | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------|-------------|
| Nama | : David | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

• **Cropping**

Nama : *Phani*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *[Signature]*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

• *Scaling (diperbesar)*

Nama : *thario*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Bele*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Cella*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Rickey*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *annie*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Yohana Tedja*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Daniel L.*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Riena Riemars*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *MAS*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *David*

Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

- **Scaling (diperkecil)**

| Nama : <i>mario</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | | ✓ |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| Nama : <i>goku</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| Nama : <i>Gila</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| Nama : <i>Ricky</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | | ✓ |

| Nama : <i>anne</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| Nama : <i>Yohanna Tedi</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| Nama : <i>Daniel Is.</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | | ✓ |

| Nama : <i>Riena</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| Nama : <i>JMPS</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| Nama : <i>David</i> | | |
|-------------------------------------|-------|-------------|
| Tanda tangan : <i>[Signature]</i> | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

• **Rotate**

Nama : David
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

Nama : *[Signature]*
Tanda tangan : *[Signature]*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | | ✓ |
| Lena 512 | | ✓ |
| Baboon 512 | | ✓ |
| Pepper 512 | | ✓ |

- **Rotate Scaling**

Nama : *tranie*

Tanda tangan : *mdr.*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *zoko*

Tanda tangan : *zoko*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Cella*

Tanda tangan : *Cella*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Richy*

Tanda tangan : *Richy*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *annie*

Tanda tangan : *annie*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Yuliana Ferdja*

Tanda tangan : *Yuliana Ferdja*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Daniel K.*

Tanda tangan : *Daniel K.*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Riena*

Tanda tangan : *Riena*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *niyas*

Tanda tangan : *niyas*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

Nama : *Pavid*

Tanda tangan : *Pavid*

| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
|-------------------------------------|-------|-------------|
| Lena 256 | | ✓ |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

• **Median Filter**

| | | |
|-------------------------------------|---------|-------------|
| Nama | : David | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|--------|-------------|
| Nama | : goku | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|----------|-------------|
| Nama | : Khando | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------|-------------|
| Nama | : Ricky | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|--------|-------------|
| Nama | : Celq | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------|-------------|
| Nama | : annie | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|----------------|-------------|
| Nama | : Yohana Dedin | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|-------------|-------------|
| Nama | : Daniel W. | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------------|-------------|
| Nama | : Riana Riana | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|----------|-------------|
| Nama | : Shyran | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

• *Noise Gaussian*

| | | |
|-------------------------------------|---------|-------------|
| Nama | : David | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|--------|-------------|
| Nama | : goku | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------|-------------|
| Nama | : Han D | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------|-------------|
| Nama | : Ricky | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|--------|-------------|
| Nama | : Celq | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------|-------------|
| Nama | : annie | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|----------------|-------------|
| Nama | : Yohana Dedin | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|-------------|-------------|
| Nama | : Daniel W. | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|---------------|-------------|
| Nama | : Riana Riana | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |

| | | |
|-------------------------------------|----------|-------------|
| Nama | : Shyran | |
| Tanda tangan : | | |
| Hasil Ekstrasi Watermark dari Citra | Jelas | Tidak Jelas |
| Lena 256 | ✓ | |
| Baboon 256 | ✓ | |
| Pepper 256 | ✓ | |
| Lena 512 | ✓ | |
| Baboon 512 | ✓ | |
| Pepper 512 | ✓ | |