

LAMPIRAN A
PROGRAM SISTEM PEMANTAUAN KETINGGIAN AIR SUNGAI
MENGGUNAKAN GELOMBANG ULTRASONIK

```
#include <LiquidCrystal.h>

void setup() {
  Serial.begin(9600);
}

void loop()
{
  const long pingPin = 7;
  long duration, cm;

  pinMode(pingPin, OUTPUT);

  digitalWrite(pingPin, LOW);
  delayMicroseconds(2);

  digitalWrite(pingPin, HIGH);
  delayMicroseconds(5);
  digitalWrite(pingPin, LOW);

  pinMode(pingPin, INPUT);

  duration = pulseIn(pingPin, HIGH);

  cm =50-(duration / 29 / 2);
```

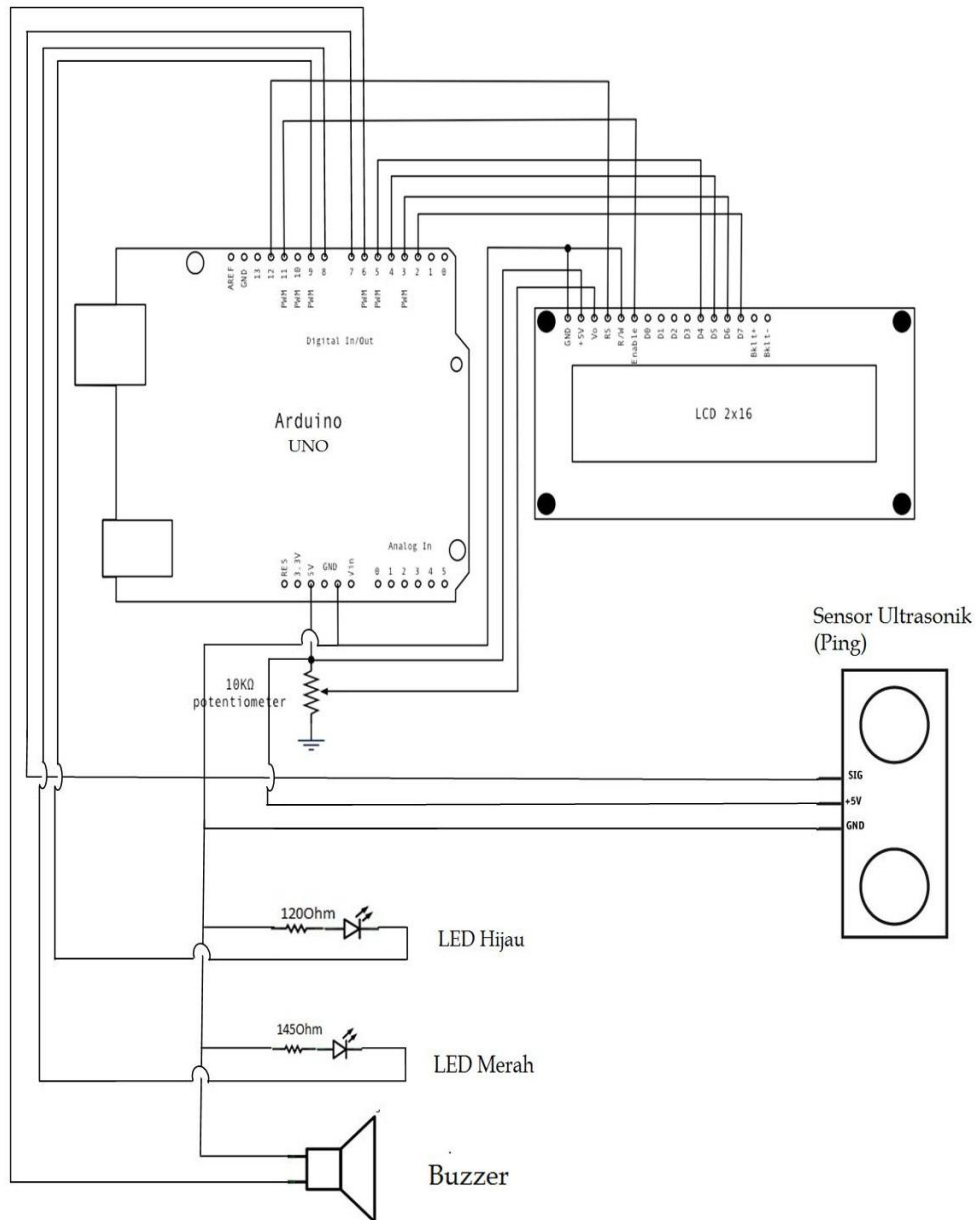
```
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);  
lcd.begin(16, 2);  
lcd.print("Ketinggian air: ");  
lcd.setCursor(0,1);  
lcd.print(cm);  
lcd.print("cm");  
delay(1000);
```

```
pinMode(8, OUTPUT);  
if(cm>=31){  
digitalWrite(8, HIGH);  
delay(500);  
digitalWrite(8, LOW);  
delay(500);  
}  
else {  
digitalWrite(8, LOW);  
}  
}
```

```
pinMode(6, OUTPUT);  
if (cm>=31){  
digitalWrite(6, HIGH);  
delay(500);  
digitalWrite(6, LOW);  
delay(500);  
}  
else {  
digitalWrite(6, LOW);  
}  
}  
pinMode(9, OUTPUT);
```

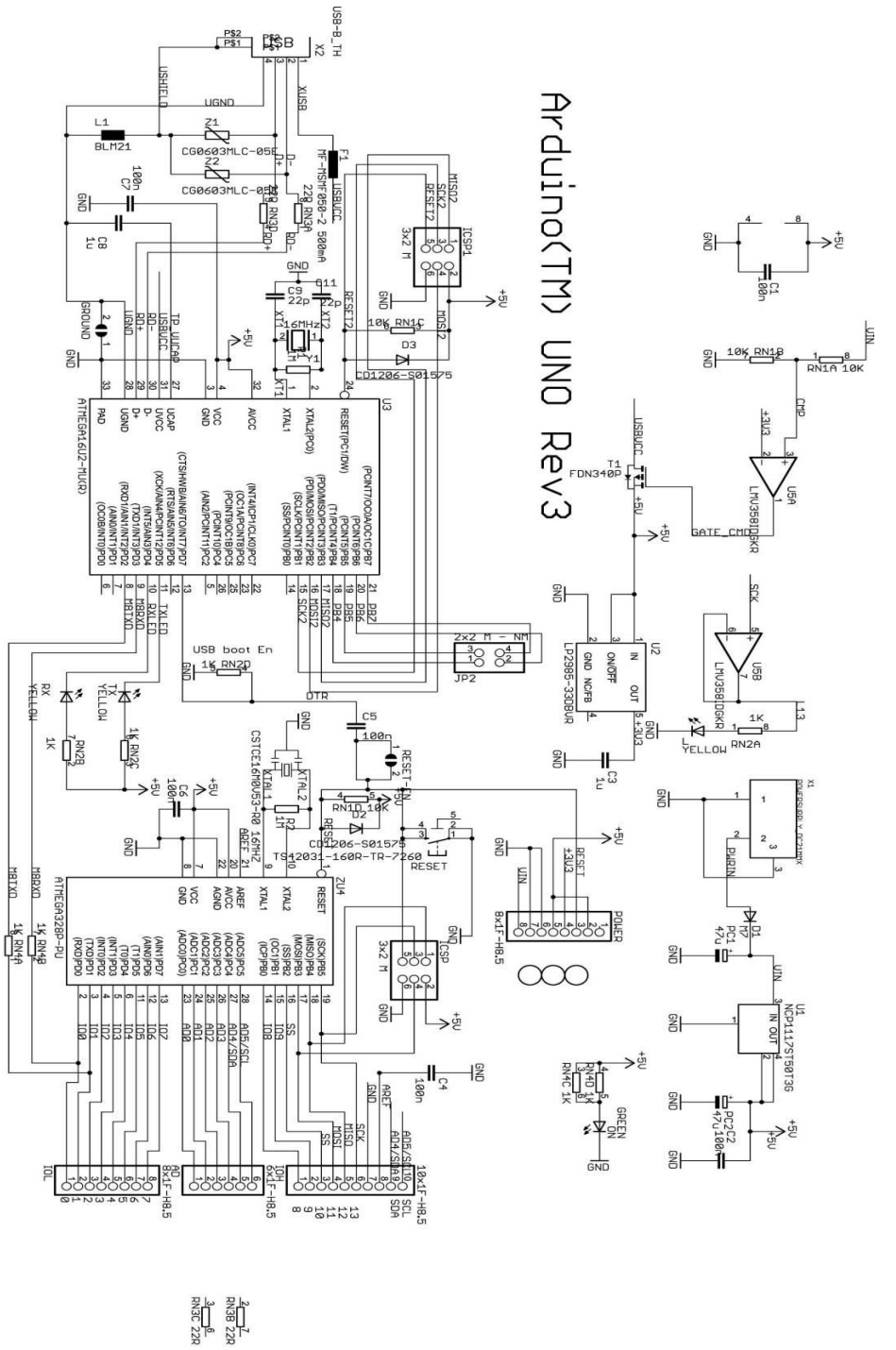
```
if (cm<=30){  
  digitalWrite(9, HIGH);  
  delay(500);  
  digitalWrite(9, LOW);  
  delay(500);  
}  
else {  
  digitalWrite(9,LOW);  
}  
}
```

LAMPIRAN B
SKEMA RANGKAIAN SISTEM PEMANTAUAN KETINGGIAN AIR
SUNGAI MENGGUNAKAN GELOMBANG ULTRASONIK



LAMPIRAN C

SKEMA RANGKAIAN ARDUINO UNO



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