

REPUBLIK INDONESIA
KEMENTERIAN HUKUM DAN HAK ASASI MANUSIA

SURAT PENCATATAN CIPTAAN

Dalam rangka perlindungan ciptaan di bidang ilmu pengetahuan, seni dan sastra berdasarkan Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta, dengan ini menerangkan:

Nomor dan tanggal permohonan : EC002024213502, 28 Oktober 2024

Pencipta

Nama : **Christophorus Ivander Menori, Nelson Karunia Bakti dkk**
Alamat : Permata Cimahi V-7 No. 6, RT. 001 RW. 014, Ngamprah, Bandung Barat, Jawa Barat, 40552
Kewarganegaraan : Indonesia

Pemegang Hak Cipta

Nama : **Universitas Kristen Maranatha**
Alamat : Jl. Prof. Drg. Surya Sumantri, M.P.H. No. 65, Sukajadi, Bandung, Jawa Barat 40164

Kewarganegaraan : Indonesia

Jenis Ciptaan : **Program Komputer**

Judul Ciptaan : **Program Simulasi Perancangan Sistem Antrian Dan Penentuan Jumlah Operator Untuk Mengurangi Panjang Antrian Dan Total Biaya Operasional Di SPBU X**

Tanggal dan tempat diumumkan untuk pertama kali : 25 November 2022, di Bandung
di wilayah Indonesia atau di luar wilayah Indonesia

Jangka waktu perlindungan : Berlaku selama 50 (lima puluh) tahun sejak Ciptaan tersebut pertama kali dilakukan Pengumuman.

Nomor pencatatan : 000785934

adalah benar berdasarkan keterangan yang diberikan oleh Pemohon.

Surat Pencatatan Hak Cipta atau produk Hak terkait ini sesuai dengan Pasal 72 Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta.



a.n. MENTERI HUKUM DAN HAK ASASI MANUSIA
DIREKTUR JENDERAL KEKAYAAN INTELEKTUAL

u.b

Direktur Hak Cipta dan Desain Industri

IGNATIUS M.T. SILALAH
NIP. 196812301996031001

Disclaimer:

Dalam hal pemohon memberikan keterangan tidak sesuai dengan surat pernyataan, Menteri berwenang untuk mencabut surat pencatatan permohonan.

LAMPIRAN PENCIPTA

No	Nama	Alamat
1	Christophorus Ivander Menori	Permata Cimahi V-7 No. 6, RT. 001 RW. 014, Ngamprah, Bandung Barat
2	Nelson Karunia Bakti	Jl. Cihideung No. 44, RT. 002 RW. 004, Cihideung, Tasikmalaya
3	David Try Liputra, S.T., M.T.	Jl. Merdeka No. 203, RT. 001 RW. 001, Siantar Barat, Pematang Siantar
4	Ir. Kartika Suhada, M.T.	Taman Cibaduyut Indah E-20, RT. 002 RW. 019, Dayeuhkolot, Bandung
5	Vivi Arisandhy, S.T., M.T.	Jl. Kresna Dlm No. 46/68, RT.008, RW. 006, Cicendo, Bandung



**CODING TEXT
PROGRAM SIMULASI
PERANCANGAN SISTEM ANTRIAN DAN PENENTUAN JUMLAH OPERATOR
UNTUK MENGURANGI PANJANG ANTRIAN DAN TOTAL BIAYA OPERASIONAL
DENGAN METODE SIMULASI DI SPBU X**

TIM PENYUSUN

**Christophorus Ivander Menori
NRP: 1623063**

**Nelson Karunia Bakti
NRP: 1823901**

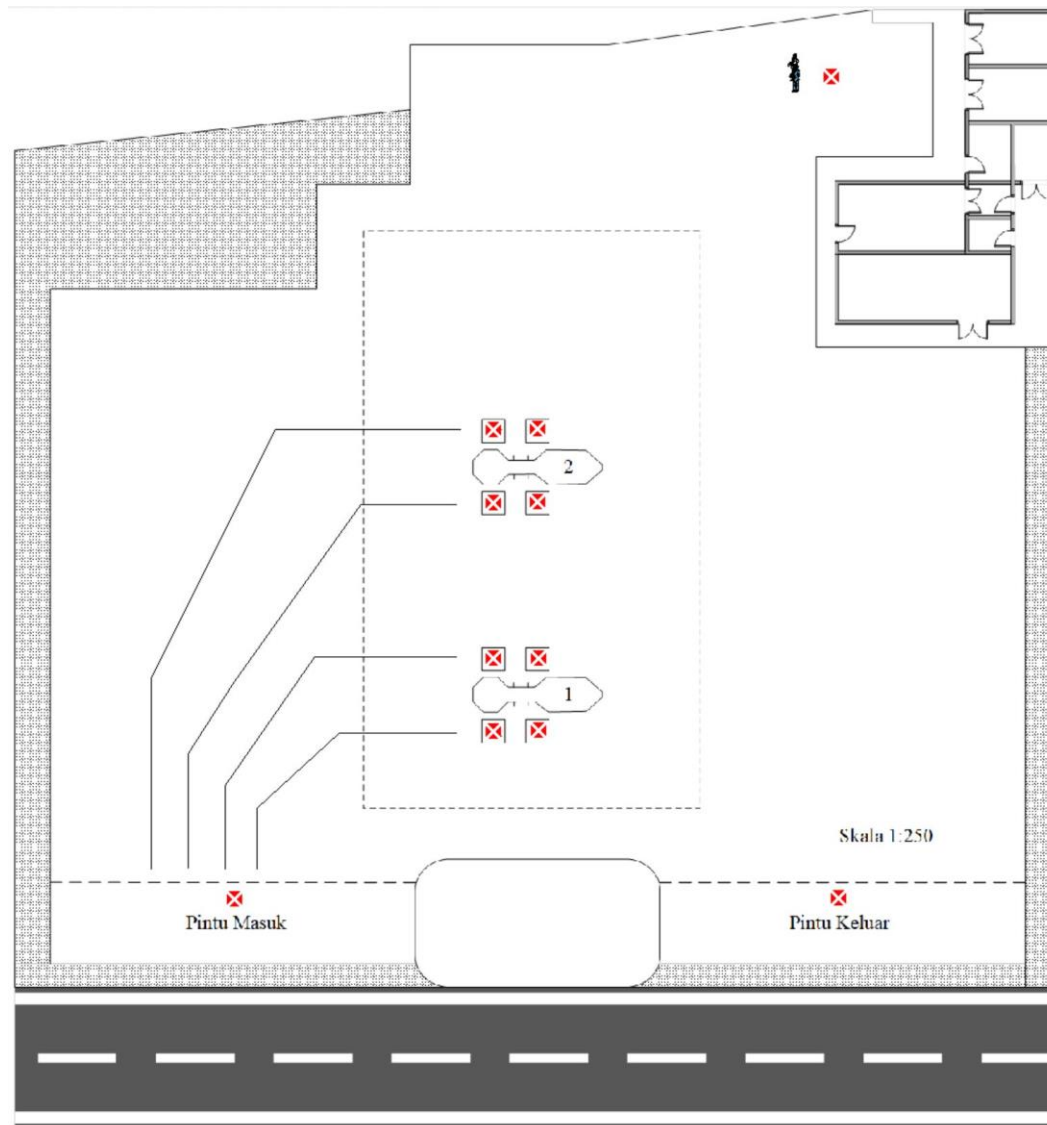
**David Try Liputra, S.T., M.T.
NIK/NIDN: 230693/ 0427098702**

**Ir. Kartika Suhada, M.T.
NIK/NIDN: 230036/0408126701**

**Vivi Arisandhy, S.T., M.T.
NIK/NIDN: 230406/0425017601**

**PROGRAM STUDI TEKNIK INDUSTRI
FAKULTAS TEKNIK
UNIVERSITAS KRISTEN MARANATHA
BANDUNG
2022**

LAYOUT PROMODEL SPBU X



CODING TEXT

```

*****
*                                     *
*               Formatted Listing of Model:               *
*       C:\Users\Nelson\Desktop\PENELITIAN SPBU\USULAN PENELITIAN SPBU.mod       *
*                                     *
*****

Time Units:                Seconds
Distance Units:            Meters
Initialization Logic:      ANIMATE 50

                             Pjg_Antrian_Max[1] = 13.185
                             Pjg_Antrian_Max[2] = 19.18
                             Pjg_Antrian_Max[3] = 23.84
                             Pjg_Antrian_Max[4] = 29.19

Termination Logic:        //DISPLAY CLOCK<HR>

                             //DISPLAY jml_antrian[1]
                             //DISPLAY jml_antrian[2]
                             //DISPLAY jml_antrian[3]
                             //DISPLAY jml_antrian[4]

*****
*                                     *
*                               Locations                               *
*                                     *
*****

Name      Cap  Units  Stats      Rules      Cost
-----
Pintu_Masuk      4    1    Time Series Oldest, ,
P01_Nozzle_A     1    1    Time Series Oldest, ,
P01_Nozzle_B     1    1    Time Series Oldest, ,
P01_Nozzle_C     1    1    Time Series Oldest, ,
P01_Nozzle_D     1    1    Time Series Oldest, ,
P01_Nozzle_E     1    1    Time Series Oldest, ,
P01_Nozzle_F     1    1    Time Series Oldest, ,
P01_Nozzle_G     1    1    Time Series Oldest, ,
P01_Nozzle_H     1    1    Time Series Oldest, ,
Pintu_Keluar     1    1    Time Series Oldest, ,
Antrian_Nozzle_AB 20   1    Time Series Oldest, FIFO,
Antrian_Nozzle_CD 20   1    Time Series Oldest, FIFO,
Antrian_Nozzle_EF 20   1    Time Series Oldest, FIFO,
Antrian_Nozzle_GH 20   1    Time Series Oldest, FIFO,
dummy_loc        1    1    Time Series Oldest, ,

*****
*                                     *
*                               Entities                               *
*                                     *
*****

Name      Speed (rpm)  Stats      Cost
-----
Mobil_Pertalite  150    Time Series
Mobil_Pertamax   150    Time Series
Motor_Pertalite  150    Time Series
Motor_Pertamax   150    Time Series
Mobil_Solar       150    Time Series
Truk              150    Time Series
Mobil_Def         150    Time Series
Motor_Def         150    Time Series
Truk_Def          150    Time Series
dummy_ent         150    Time Series

*****
*                                     *
*                               Path Networks                               *
*                                     *
*****

Name      Type      I/S      From      To      BI      Dist/Time      Speed Factor
-----
Jalur_Pegawai Passing      Speed & Distance
                             N1      N2      Bi      2.43      1
                             N2      N3      Bi      2.85      1
                             N2      N4      Bi      8.86      1
                             N4      N5      Bi      2.29      1
                             N4      N6      Bi      3.59      1
                             N4      N7      Bi      17.29     1
                             N7      N8      Bi      2.42      1
                             N7      N9      Bi      3.29      1
                             N7      N10     Bi      8.00      1
                             N10     N11     Bi      3.01      1
                             N10     N12     Bi      2.87      1
                             N2      N13     Bi      46.14     1
                             N13     N14     Bi      31.00     1

```

```
*****
*                                     *
*                               Interfaces                               *
*                                     *
```

Net	Node	Location
Jalur_Pegawai	N1	P01_Nozzle_G
	N3	P01_Nozzle_H
	N5	P01_Nozzle_E
	N6	P01_Nozzle_F
	N8	P01_Nozzle_C
	N9	P01_Nozzle_D
	N11	P01_Nozzle_A
	N12	P01_Nozzle_B

```
*****
*                                     *
*                               Mapping                               *
*                                     *
```

Net	From	To	Dest
Jalur_Pegawai	N2	N1	
	N4	N2	
	N7	N4	
	N10	N7	
	N2	N3	
	N2	N4	
	N4	N5	
	N4	N6	
	N4	N7	
	N7	N8	
	N7	N9	
	N7	N10	
	N10	N11	
	N10	N12	
	N2	N13	

```
*****
*                                     *
*                               Resources                               *
*                                     *
```

Name	Units	Stats	Res Search	Ent Search	Path	Motion	Cost
Pegawai_Pagi	jml_operatorpagi	By Unit	Closest	Closest	Jalur_Pegawai Home: N14	Empty: 60 mpn Full: 60 mpn	
Pegawai_Sore	jml_operatorsore	By Unit	Closest	Closest	Jalur_Pegawai Home: N14	Empty: 60 mpn Full: 60 mpn	

```
*****
*                                     *
*                               Clock downtimes for Resources          *
*                                     *
```

Res	Frequency	First Time	Priority	Scheduled	Node	List	Disable	Logic
Pegawai_Sore	12 HR	330 MIN	99	Yes	N14	1-3	Yes	//Buat Karyawan 6 Orang WAIT 30 MIN
	12 HR	360 MIN	99	Yes	N14	4-6	Yes	//Buat Karyawan 6 Orang WAIT 30 MIN
	12 HR	330 MIN	99	Yes	N14	1-3	Yes	//Buat Karyawan 5 Orang WAIT 30 MIN
	12 HR	360 MIN	99	Yes	N14	4-5	Yes	//Buat Karyawan 5 Orang WAIT 30 MIN

```

*****
*                                     *
*                                     *
*****

```

		Process		Routing			
Entity	Location	Operation	Blk	Output	Destination	Rule	Move Logic
dummy_ent	dummy_loc	kedatangan_pagi = 0 kedatangan_sore = 1 WAIT 6 HR					
			1	dummy_ent	EXIT	FIRST 1	
Mobil_Def	Pintu_Masuk		1	Mobil_Pertalite	Pintu_Masuk	0.637000 1	kedatangan_pagi = 1 kedatangan_sore = 0
Mobil_Pertalite	Pintu_Masuk	//Nozzle F IF Isi_Antrian_Nozzle_EF + pjg_kendaraan < pjg_Antrian_Max[3] THEN < ROUTE 1 > ELSE < ROUTE 2 >					
			1	Mobil_Pertalite	Antrian_Nozzle_EF	FIRST 1	masuk_antri = CLOCK<SEC> INC Isi_Antrian_Nozzle_EF, pjg_kendaraan
Mobil_Pertamax	Pintu_Masuk	//Nozzle A IF Isi_Antrian_Nozzle_AB + pjg_kendaraan < pjg_Antrian_Max[1] THEN < ROUTE 1 > ELSE < ROUTE 2 >	2	Mobil_Pertalite	EXIT	FIRST 1	
			1	Mobil_Pertamax	Antrian_Nozzle_AB	FIRST 1	masuk_antri = CLOCK<SEC> INC Isi_Antrian_Nozzle_AB, pjg_kendaraan
Motor_Def	Pintu_Masuk		2	Mobil_Pertamax	EXIT	FIRST 1	
Motor_Pertalite	Pintu_Masuk		1	Motor_Pertalite	Pintu_Masuk	0.704800 1	
		INT feas_ab = 1 INT feas_cd = 1 INT feas_gh = 1 IF Isi_Antrian_Nozzle_AB + pjg_kendaraan > pjg_antrian_max[1] THEN feas_ab = 100 IF Isi_Antrian_Nozzle_CD + pjg_kendaraan > pjg_antrian_max[2] THEN feas_cd = 100 IF Isi_Antrian_Nozzle_GH + pjg_kendaraan > pjg_antrian_max[4] THEN feas_gh = 100 REAL skor_ab = Isi_Antrian_Nozzle_AB * feas_ab REAL skor_cd = Isi_Antrian_Nozzle_CD * feas_cd REAL skor_gh = Isi_Antrian_Nozzle_GH * feas_gh IF feas_ab + feas_cd + feas_gh = 300 THEN < ROUTE 4 > ELSE < IF skor_ab < skor_gh THEN < IF skor_ab < skor_cd THEN < ROUTE 1 > ELSE < ROUTE 2 > > > > ELSE < IF skor_gh < skor_cd THEN < ROUTE 3 > ELSE < ROUTE 2 > > > > >					

Motor_Def	Pintu_Masuk	2	Mobil_Pertamax	EXIT	FIRST 1	
		1	Motor_Pertalite	Pintu_Masuk	0.704800	1
Motor_Pertalite	Pintu_Masuk		Motor_Pertamax	Pintu_Masuk	0.295200	


```

INT feas_ab = 1
INT feas_cd = 1
INT feas_gh = 1

IF Isi_Antrian_Nozzle_AB + pjpg_kendaraan > pjpg_antrian_max[1] THEN feas_ab = 100
IF Isi_Antrian_Nozzle_CD + pjpg_kendaraan > pjpg_antrian_max[2] THEN feas_cd = 100
IF Isi_Antrian_Nozzle_GH + pjpg_kendaraan > pjpg_antrian_max[4] THEN feas_gh = 100

REAL skor_ab = Isi_Antrian_Nozzle_AB * feas_ab
REAL skor_cd = Isi_Antrian_Nozzle_CD * feas_cd
REAL skor_gh = Isi_Antrian_Nozzle_GH * feas_gh

IF feas_ab + feas_cd + feas_gh = 300 THEN
<
  ROUTE 4
>
ELSE
<
IF skor_ab < skor_gh THEN
<
  IF skor_ab < skor_cd THEN
<
    ROUTE 1
  >
  ELSE
<
    ROUTE 2
  >
>
ELSE
<
  IF skor_gh < skor_cd THEN
<
    ROUTE 3
  >
  ELSE
<
    ROUTE 2
  >
>
>
>

```


		1	Motor_Pertalite	Antrian_Nozzle_AB	FIRST 1	masuk_antri = CLOCK<SEC> INC Isi_Antrian_Nozzle_AB, pjpg_kendaraan
		2	Motor_Pertalite	Antrian_Nozzle_CD	FIRST 1	masuk_antri = CLOCK<SEC> INC Isi_Antrian_Nozzle_CD, pjpg_kendaraan
		3	Motor_Pertalite	Antrian_Nozzle_GH	FIRST 1	masuk_antri = CLOCK<SEC> INC Isi_Antrian_Nozzle_GH, pjpg_kendaraan
Motor_Pertamax	Pintu_Masuk	4	Motor_Pertalite	EXIT	FIRST 1	


```

INT feas_ab = 1
INT feas_cd = 1

IF Isi_Antrian_Nozzle_AB + pjpg_kendaraan > pjpg_antrian_max[1] THEN feas_ab = 100
IF Isi_Antrian_Nozzle_CD + pjpg_kendaraan > pjpg_antrian_max[2] THEN feas_cd = 100

REAL skor_ab = Isi_Antrian_Nozzle_AB * feas_ab
REAL skor_cd = Isi_Antrian_Nozzle_CD * feas_cd

IF feas_ab + feas_cd = 200 THEN
<
  ROUTE 3
>
ELSE IF skor_ab < skor_cd THEN
<
  ROUTE 1
>
ELSE
<
  ROUTE 2
>
>

```


		1	Motor_Pertamax	Antrian_Nozzle_AB	FIRST 1	masuk_antri = CLOCK<SEC> INC Isi_Antrian_Nozzle_AB, pjpg_kendaraan
		2	Motor_Pertamax	Antrian_Nozzle_CD	FIRST 1	masuk_antri = CLOCK<SEC> INC Isi_Antrian_Nozzle_CD, pjpg_kendaraan
Truk_Def	Pintu_Masuk	3	Motor_Def	EXIT	FIRST 1	
		1	Truk	Pintu_Masuk	0.627300	1
			Mobil_Solar	Pintu_Masuk	0.372700	

						pjpg_kendaraan = 5.96
						pjpg_kendaraan = 4.17

Truk_Def	Pintu_Masuk	3	Motor_Def	EXIT	FIRST 1	
		1	Truk	Pintu_Masuk	0.627300	1 ppg_kendaraan = 5.96
			Mobil_Solar	Pintu_Masuk	0.372700	1 ppg_kendaraan = 4.17
Truk	Pintu_Masuk	IF Isi_Antrian_Nozzle_EF + ppg_kendaraan < ppg_Antrian_Max[3] THEN				
		< ROUTE 1				
		> ELSE				
		< ROUTE 2				
		1	Truk	Antrian_Nozzle_EF	FIRST 1	masuk_antri = CLOCK<SEC>
						INC Isi_Antrian_Nozzle_EF, ppg_kendaraan
Mobil_Solar	Pintu_Masuk	2	Truk	EXIT	FIRST 1	
						1 ppg_kendaraan < ppg_Antrian_Max[4] THEN
		< ROUTE 1				
		> ELSE				
		< ROUTE 2				
		1	Mobil_Solar	Antrian_Nozzle_GH	FIRST 1	masuk_antri = CLOCK<SEC>
						INC Isi_Antrian_Nozzle_GH, ppg_kendaraan
ALL	Antrian_Nozzle_AB	2	Mobil_Solar	EXIT	FIRST 1	
		//Mobil dan Motor				
		MOUE				
		WAIT UNTIL Slot_P1_AB = 0				
		IF ENTITY<> = 2 THEN				
		< ROUTE 1				
		> ELSE IF ENTITY<> = 4 THEN				
		< ROUTE 2				
		> ELSE IF ENTITY<> = 3 THEN				
		< ROUTE 3				
		1	Mobil_Pertanax	P01_Nozzle_A	FIRST 1	INC Slot_P1_AB
						DEC Isi_Antrian_Nozzle_AB, ppg_kendaraan
						Waktu_Antri_Mobil = CLOCK<SEC> - masuk_antri
		2	Motor_Pertanax	P01_Nozzle_A	FIRST 1	INC Slot_P1_AB
						DEC Isi_Antrian_Nozzle_AB, ppg_kendaraan
						Waktu_Antri_Motor = CLOCK<SEC> - masuk_antri
		3	Motor_Portalite	P01_Nozzle_B	FIRST 1	INC Slot_P1_AB
						DEC Isi_Antrian_Nozzle_AB, ppg_kendaraan
						Waktu_Antri_Motor = CLOCK<SEC> - masuk_antri

```

ALL      Antrian_Nozzle_CD //Motor
        IF ENTITY<> = 4 THEN
        <
        ROUTE 1
        >
        ELSE IF ENTITY<> = 3 THEN
        <
        ROUTE 2
        >
        1      Motor_Pertamax   P01_Nozzle_C   FIRST 1      DEC Isi_Antrian_Nozzle_CD, p_jg_kendaraan
        2      Motor_Pertalite   P01_Nozzle_D   FIRST 1      Waktu_Antri_Motor = CLOCK<SEC> - masuk_antri
                                                                DEC Isi_Antrian_Nozzle_CD, p_jg_kendaraan
                                                                Waktu_Antri_Motor = CLOCK<SEC> - masuk_antri
ALL      Antrian_Nozzle_EF //Truk dan Mobil
        MOVE
        WAIT UNTIL Slot_P1_EF = 0
        IF ENTITY<> = 6 THEN
        <
        ROUTE 1
        >
        ELSE IF ENTITY<> = 1 THEN
        <
        ROUTE 2
        >
        1      Truk              P01_Nozzle_E   FIRST 1      INC Slot_P1_EF
                                                                DEC Isi_Antrian_Nozzle_EF, p_jg_kendaraan
                                                                Waktu_Antri_Trak = CLOCK<SEC> - masuk_antri
        2      Mobil_Pertalite   P01_Nozzle_F   FIRST 1      INC Slot_P1_EF
                                                                DEC Isi_Antrian_Nozzle_EF, p_jg_kendaraan
                                                                Waktu_Antri_Mobil = CLOCK<SEC> - masuk_antri
ALL      Antrian_Nozzle_GH //Mobil Solar dan Motor
        MOVE
        WAIT UNTIL Slot_P1_GH = 0
        IF ENTITY<> = 5 THEN
        <
        ROUTE 1
        >
        ELSE IF ENTITY<> = 3 THEN
        <
        ROUTE 2
        >
        1      Mobil_Solar       P01_Nozzle_G   FIRST 1      INC Slot_P1_GH
                                                                DEC Isi_Antrian_Nozzle_GH, p_jg_kendaraan
                                                                Waktu_Antri_Trak = CLOCK<SEC> - masuk_antri
        2      Motor_Pertalite   P01_Nozzle_H   FIRST 1      INC Slot_P1_GH
                                                                DEC Isi_Antrian_Nozzle_GH, p_jg_kendaraan
                                                                Waktu_Antri_Motor = CLOCK<SEC> - masuk_antri
ALL      P01_Nozzle_A
        IF ENTITY<> = 2 THEN
        <
        //Mobil
        USE Pegawai_Sore FOR -140+249*(1./<<(1./U<0.5,0.5>)-1.)>)*(1./13.9) SEC OR Pegawai_Pagi FOR -140+249*(1./<<(1./U<0.5,0.5>)-1.)>)*(1./13.9) SEC
        >
        ELSE IF ENTITY<> = 4 THEN
        <
        //Motor
        USE Pegawai_Sore FOR T<23.6, 26.8, 88.9> SEC OR Pegawai_Pagi FOR T<23.6, 26.8, 88.9> SEC
        >
        ELSE
        <
        DISPLAY "ERROR, UNIDENTIFIED ENTITY"
        >
        1      ALL                Pintu_Keluar   FIRST 1      DEC Slot_P1_AB
ALL      P01_Nozzle_B
        //Motor
        USE Pegawai_Sore FOR T<23.6, 26.8, 88.9> SEC OR Pegawai_Pagi FOR T<23.6, 26.8, 88.9> SEC
        1      ALL                Pintu_Keluar   FIRST 1      DEC Slot_P1_AB
ALL      P01_Nozzle_C
        //Motor
        USE Pegawai_Sore FOR T<23.6, 26.8, 88.9> SEC OR Pegawai_Pagi FOR T<23.6, 26.8, 88.9> SEC
        1      ALL                Pintu_Keluar   FIRST 1
ALL      P01_Nozzle_D
        //Motor
        USE Pegawai_Sore FOR T<23.6, 26.8, 88.9> SEC OR Pegawai_Pagi FOR T<23.6, 26.8, 88.9> SEC
        1      ALL                Pintu_Keluar   FIRST 1
ALL      P01_Nozzle_E
        //Truk
        USE Pegawai_Sore FOR 139+U<1.27, 127> SEC OR Pegawai_Pagi FOR 139+U<1.27, 127> SEC
        1      ALL                Pintu_Keluar   FIRST 1      DEC Slot_P1_EF
ALL      P01_Nozzle_F
        //Mobil
        USE Pegawai_Sore FOR -140+249*(1./<<(1./U<0.5,0.5>)-1.)>)*(1./13.9) SEC OR Pegawai_Pagi FOR -140+249*(1./<<(1./U<0.5,0.5>)-1.)>)*(1./13.9) SEC
        1      ALL                Pintu_Keluar   FIRST 1      DEC Slot_P1_EF
ALL      P01_Nozzle_G
        //Truk
        USE Pegawai_Sore FOR 139+U<1.27, 127> SEC OR Pegawai_Pagi FOR 139+U<1.27, 127> SEC
        1      ALL                Pintu_Keluar   FIRST 1      DEC Slot_P1_GH

```

```

ALL          P01_Nozzle_G      //Truk
USE Pegawai_Sore FOR 139+U<1.27, 127> SEC OR Pegawai_Pagi FOR 139+U<1.27, 127> SEC
1          ALL          Pintu_Keluar          FIRST 1          DEC Slot_P1_GH

ALL          P01_Nozzle_H      //Motor
USE Pegawai_Sore FOR T<23.6, 26.8, 88.9> SEC OR Pegawai_Pagi FOR T<23.6, 26.8, 88.9> SEC
1          ALL          Pintu_Keluar          FIRST 1          DEC Slot_P1_GH

ALL          Pintu_Keluar      1          ALL          EXIT          FIRST 1

*****
*                      Arrivals                      *
*****
Entity      Location      Qty Each      First Time      Occurrences      Frequency      Logic
Mobil_Def   Pintu_Masuk   kedatangan_pagi   INF              1+81.2*(1./<(1./U<0.5,0.5>)-1.)>)*(1./2.24)   p_jg_kendaraan = 4.395
Motor_Def   Pintu_Masuk   kedatangan_pagi   INF              -0.182+247*(1./<(1.+EXP<-(N<0.,1.)-2.09>/0.778)>>)   p_jg_kendaraan = 1.918
Truk_Def    Pintu_Masuk   kedatangan_pagi   INF              0.933+G<1.04, 163>
Mobil_Def   Pintu_Masuk   kedatangan_sore   INF              -8.56+P5<1.72, 128>
Motor_Def   Pintu_Masuk   kedatangan_sore   INF              -5.75+P5<1.34, 34.3>
Truk_Def    Pintu_Masuk   kedatangan_sore   INF              24.7*(1./0.0091)*<-LN<U<0.5,0.5>>)*<-1./1.3>
dummy_ent   dummy_loc      1          Wk 1, Mon @ 12:00 PM 1

*****
*                      Shift Assignments              *
*****
Locations... Resources... Shift Files...      Priorities... Disable Logic...
Pegawai_Pagi C:\Users\Nelson\Desktop\Aplika 99.99.99.99 No
Pegawai_Sore C:\Users\Nelson\Desktop\Aplika 99.99.99.99 No

*****
*                      Attributes                      *
*****
ID          Type          Classification
No_Antri    Integer          Entity
masuk_antri Real          Entity
p_jg_kendaraan Real          Entity

*****
*                      Variables (global)              *
*****
ID          Type          Initial value Stats
#//17.58
Isi_Antrian_Nozzle_AB Real          0          Time Series
#//19.18
Isi_Antrian_Nozzle_CD Real          0          Time Series
#//29.8
Isi_Antrian_Nozzle_EF Real          0          Time Series
#//33.36
Isi_Antrian_Nozzle_GH Real          0          Time Series
kedatangan_pagi Integer          1          Time Series
kedatangan_sore Integer          0          Time Series
Slot_P1_AB   Integer          0          Time Series
Slot_P1_EF   Integer          0          Time Series
Slot_P1_GH   Integer          0          Time Series
Waktu_Antri_Mobil Real          0          Time Series
Waktu_Antri_Motor Real          0          Time Series
Waktu_Antri_Truk Real          0          Time Series

*****
*                      Arrays                          *
*****
ID          Dimensions      Type
p_jg_antrian_max 4          Real

```

```

*****
*                                     arrays                                     *
*****

ID          Dimensions  Type
-----
pjpg_antrian_max 4          Real

*****
*                                     Macros                                     *
*****

ID          Text
-----
jml_operatorpagi 7
jml_operatorsore 6

*****
*                                     External Files                             *
*****

ID          Type          File Name          Prompt
-----
<null>      Shift         C:\Users\Nelson\Desktop\Aplikasi\shift pagi.sft
<null>      Shift         C:\Users\Nelson\Desktop\Aplikasi\shift sore.sft

```