

# **LAMPIRAN**

***Skript Pengendali darurat :***

```
int cek = 12;

char send = 'a';

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

pinMode(cek, OUTPUT); // membuat cek menjadi OUTPUT.

}

void loop() {

// put your main code here, to run repeatedly:

Serial.print(send);

digitalWrite(cek, HIGH);

delay(1800); //delay looping 0.1 detik}

}
```

### ***Skript Traffic Light :***

```
int a = 2; int b = 3; int c = 4; int d = 5; int e = 6; int f = 7; int g = 8;

int Merah = 9; int Kuning = 10; int Hijau = 11; int Biru = 12;

char out;

int x = 0;

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

pinMode(a, OUTPUT); // membuat a menjadi OUTPUT.

pinMode(b, OUTPUT); // membuat b menjadi OUTPUT.

pinMode(c, OUTPUT); // membuat c menjadi OUTPUT.

pinMode(d, OUTPUT); // membuat e menjadi OUTPUT.

pinMode(e, OUTPUT); // membuat e menjadi OUTPUT.

pinMode(f, OUTPUT); // membuat f menjadi OUTPUT.

pinMode(g, OUTPUT); // membuat g menjadi OUTPUT.

pinMode(Merah, OUTPUT); // membuat merah menjadi OUTPUT.

pinMode(Kuning, OUTPUT); // membuat kuning menjadi OUTPUT.

pinMode(Hijau, OUTPUT); // membuat hijau menjadi OUTPUT.

pinMode(Biru, OUTPUT); // membuat biru menjadi OUTPUT.

void loop() {

// put your main code here, to run repeatedly:

// EMERGENCY MODE

out = Serial.read();
```

```

if (out == 'a') {

digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,
LOW);digitalWrite(Biru, HIGH);// Emergency

digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);
digitalWrite(g, LOW); // 0

delay(1000);

digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,
LOW);digitalWrite(Biru, HIGH);// Emergency

digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);
digitalWrite(g, LOW); // 0

delay(1000);

}

// NORMAL MODE

if (x== 0 &&out !='a') {

digitalWrite(Merah, LOW); digitalWrite(Kuning, LOW); digitalWrite(Hijau,
HIGH);digitalWrite(Biru, LOW);// Hijau

digitalWrite(a, HIGH); digitalWrite(b, LOW); digitalWrite(c, HIGH);
digitalWrite(d, HIGH); digitalWrite(e, LOW); digitalWrite(f, HIGH);
digitalWrite(g, HIGH);// 5

delay(1000);

x=1; }

// EMERGENCY MODE

out = Serial.read();

```

```

if (out == 'a') {

digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,
LOW);digitalWrite(Biru, HIGH);// Emergency

digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);
digitalWrite(g, LOW); // 0

delay(1000);

digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,
LOW);digitalWrite(Biru, HIGH);// Emergency

digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);
digitalWrite(g, LOW); // 0

delay(1000);

}

// NORMAL MODE

if (x== 1&&out !='a') {

digitalWrite(Merah, LOW); digitalWrite(Kuning, LOW); digitalWrite(Hijau,
HIGH);digitalWrite(Biru, LOW);// Hijau

digitalWrite(a, LOW); digitalWrite(b, HIGH); digitalWrite(c, HIGH);
digitalWrite(d, LOW); digitalWrite(e, LOW); digitalWrite(f, HIGH);
digitalWrite(g, HIGH);// 4

delay(1000);

x=2;}

// EMERGENCY MODE

out = Serial.read();

if (out == 'a') {

```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 2&&out !='a') {
```

```
digitalWrite(Merah, LOW); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
HIGH);digitalWrite(Biru, LOW);// Hijau
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, LOW); digitalWrite(f, LOW);  
digitalWrite(g, HIGH);// 3
```

```
delay(1000);
```

```
x=3;}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```
if (out =='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 3&&out !='a') {
```

```
digitalWrite(Merah, LOW); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
HIGH);digitalWrite(Biru, LOW); // Hijau
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, LOW);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, LOW);  
digitalWrite(g, HIGH);// 2
```

```
delay(1000);
```

```
x=4;}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```
if (out =='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW); digitalWrite(Biru, HIGH); // Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW); digitalWrite(Biru, HIGH); // Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x == 4 && out != 'a') {
```

```
digitalWrite(Merah, LOW); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
HIGH); digitalWrite(Biru, LOW); // Hijau
```

```
digitalWrite(a, LOW); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, LOW); digitalWrite(e, LOW); digitalWrite(f, LOW);  
digitalWrite(g, LOW); // 1
```

```
delay(1000);
```

```
x=5;}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```
if (out == 'a') {
```



```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 5&&out !='a') {
```

```
digitalWrite(Merah, LOW); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
HIGH);digitalWrite(Biru, LOW);// Hijau
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW);// 0
```

```
delay(1000);
```

```
x=6;
```

```
}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```
if (out =='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 6&&out !='a') {
```

```
digitalWrite(Merah, LOW); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, LOW); // Kuning
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW);// 0
```

```
delay(1000);
```

```
x=7;
```

```
}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```

if (out == 'a') {

digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,
LOW);digitalWrite(Biru, HIGH);// Emergency

digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);
digitalWrite(g, LOW); // 0

delay(1000);

digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,
LOW);digitalWrite(Biru, HIGH);// Emergency

digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);
digitalWrite(g, LOW); // 0

delay(1000);

}

// NORMAL MODE

if (x == 7 && out != 'a') {

digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,
LOW);digitalWrite(Biru, LOW);// Merah

digitalWrite(a, HIGH); digitalWrite(b, LOW); digitalWrite(c, HIGH);
digitalWrite(d, HIGH); digitalWrite(e, LOW); digitalWrite(f, HIGH);
digitalWrite(g, HIGH);// 5

delay(1000);

x=8; }

// EMERGENCY MODE

out = Serial.read();

if (out == 'a') {

```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 8&&out !='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, LOW);// Merah
```

```
digitalWrite(a, LOW); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, LOW); digitalWrite(e, LOW); digitalWrite(f, HIGH);  
digitalWrite(g, HIGH);// 4
```

```
delay(1000);
```

```
x=9;}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```
if (out =='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 9&&out !='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, LOW);// Merah
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, LOW); digitalWrite(f, LOW);  
digitalWrite(g, HIGH);// 3
```

```
delay(1000);
```

```
x=10;}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```
if (out =='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 10&&out !='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, LOW);// Merah
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, LOW);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, LOW);  
digitalWrite(g, HIGH);// 2
```

```
delay(1000);
```

```
x=11;}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```
if (out =='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 11&&out !='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, LOW);// Merah
```

```
digitalWrite(a, LOW); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, LOW); digitalWrite(e, LOW); digitalWrite(f, LOW);  
digitalWrite(g, LOW);// 1
```

```
delay(1000);
```

```
x=12;}
```

```
// EMERGENCY MODE
```

```
out = Serial.read();
```

```
if (out =='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, HIGH); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, HIGH);// Emergency
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW); // 0
```

```
delay(1000);
```

```
}
```

```
// NORMAL MODE
```

```
if (x== 12&&out !='a') {
```

```
digitalWrite(Merah, HIGH); digitalWrite(Kuning, LOW); digitalWrite(Hijau,  
LOW);digitalWrite(Biru, LOW); // Merah
```

```
digitalWrite(a, HIGH); digitalWrite(b, HIGH); digitalWrite(c, HIGH);  
digitalWrite(d, HIGH); digitalWrite(e, HIGH); digitalWrite(f, HIGH);  
digitalWrite(g, LOW);// 0
```

```
delay(1000);
```

```
x=0;
```

```
}
```

```
}
```