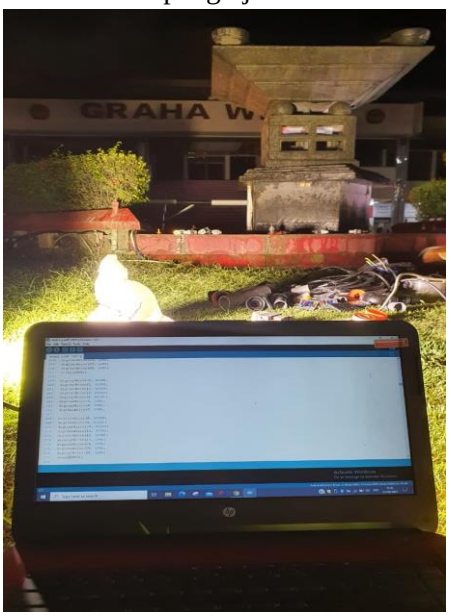
Lampiran

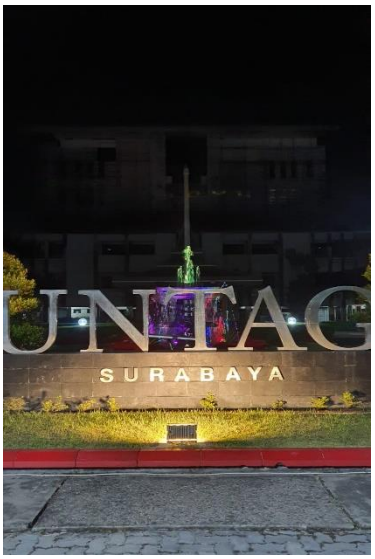
- Proses pengerjaan air mancur



- Gambar proses pengerjaan panel untuk air mancur

Gambar untuk selenoid dan pompa 1 fasa untuk air mancur

Gambar pengecekan daya dan tegangan untuk air mancur



Gambar hasil air mancur

- Program alat

```
void setup() {
  // put your setup code here, to run once:
  pinMode(0, OUTPUT);
  pinMode(1, OUTPUT);
  pinMode(2, OUTPUT);
  pinMode(3, OUTPUT);
  pinMode(4, OUTPUT);
  pinMode(5, OUTPUT);
  pinMode(6, OUTPUT);
  pinMode(7, OUTPUT);
  pinMode(8, OUTPUT);
  pinMode(9, OUTPUT);
  pinMode(10, OUTPUT);
  pinMode(11, OUTPUT);
  pinMode(12, OUTPUT);
  pinMode(13, OUTPUT);
  pinMode(14, OUTPUT);
  pinMode(15, OUTPUT);
  pinMode(17, OUTPUT);
  pinMode(18, OUTPUT);
  pinMode(19, OUTPUT);
```

```
  pinMode(20, OUTPUT);
}

void loop() {
  // put your main code here, to run repeatedly:
  // mode 1, Nyala bersamaan pin 1 sampai 7, kemudian pin 8 sampai 15 dan
selanjutnya pin 20

  digitalWrite(17, HIGH);   //pompa 1 on
  digitalWrite(0, HIGH);
  digitalWrite(1, HIGH);
  digitalWrite(2, HIGH);
  digitalWrite(3, HIGH);
  digitalWrite(4, HIGH);
  digitalWrite(5, HIGH);
  digitalWrite(6, HIGH);
  digitalWrite(7, HIGH);
  delay (2000);

  digitalWrite(18, HIGH);   //pompa 2 on
  digitalWrite(8, HIGH);
  digitalWrite(9, HIGH);
  digitalWrite(10, HIGH);
  digitalWrite(11, HIGH);
  digitalWrite(12, HIGH);
  digitalWrite(13, HIGH);
  digitalWrite(14, HIGH);
  digitalWrite(15, HIGH);
  delay (2000);

  digitalWrite(20, HIGH);   //pompa 3 on
  delay (1000);
  digitalWrite(20, LOW);    //pompa 3 off
  delay (500);

  digitalWrite(18, LOW);    //pompa 2 off
  digitalWrite(8, LOW);
  digitalWrite(9, LOW);
  digitalWrite(10, LOW);
```

```
digitalWrite(11, LOW);
digitalWrite(12, LOW);
digitalWrite(13, LOW);
digitalWrite(14, LOW);
digitalWrite(15, LOW);
delay (2000);

digitalWrite(18, LOW);   //pompa 1 off
digitalWrite(0, LOW);
digitalWrite(1, LOW);
digitalWrite(2, LOW);
digitalWrite(3, LOW);
digitalWrite(4, LOW);
digitalWrite(5, LOW);
digitalWrite(6, LOW);
digitalWrite(7, LOW);
delay (2000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, HIGH);
digitalWrite(6, HIGH);
digitalWrite(7, HIGH);
delay (2000);

digitalWrite(18, HIGH);  //pompa 1 on
digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
digitalWrite(13, HIGH);
digitalWrite(14, HIGH);
digitalWrite(15, HIGH);
delay (2000);
```

```
digitalWrite(20, HIGH);  //pompa 3 on
delay (3000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(0, HIGH);
delay (1000);
digitalWrite(0, LOW);
delay (1000);
digitalWrite(1, HIGH);
delay (1000);
digitalWrite(1, LOW);
delay (1000);
digitalWrite(2, HIGH);
delay (1000);
digitalWrite(2, LOW);
delay (1000);
digitalWrite(3, HIGH);
delay (1000);
digitalWrite(3, LOW);
delay (1000);
digitalWrite(4, HIGH);
delay (1000);
digitalWrite(4, LOW);
delay (1000);
digitalWrite(5, HIGH);
delay (1000);
digitalWrite(5, LOW);
delay (1000);
digitalWrite(6, HIGH);
delay (1000);
digitalWrite(6, LOW);
delay (1000);
digitalWrite(7, HIGH);
delay (1000);
digitalWrite(20, HIGH);  //pompa 3 on
digitalWrite(17, LOW);   //pompa 1 off
digitalWrite(7, LOW);
delay (3000);
digitalWrite(17, LOW);
```

```
digitalWrite(8, LOW);
delay (2000);
digitalWrite(18, HIGH);  //pompa 2 on
digitalWrite(9, HIGH);
delay (2000);
digitalWrite(9, LOW);
delay (1000);
digitalWrite(10, HIGH);
delay (1000);
digitalWrite(10, LOW);
delay (1000);
digitalWrite(11, HIGH);
delay (1000);
digitalWrite(11, LOW);
delay (1000);
digitalWrite(12, HIGH);
delay (1000);
digitalWrite(12, LOW);
delay (1000);
digitalWrite(13, HIGH);
delay (1000);
digitalWrite(13, LOW);
delay (1000);
digitalWrite(14, HIGH);
delay (1000);
digitalWrite(14, LOW);
delay (1000);
digitalWrite(15, HIGH);
delay (1000);
digitalWrite(18, LOW);   //pompa 2 off
digitalWrite(15, LOW);
delay (2000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(0, HIGH);
digitalWrite(1, LOW);
digitalWrite(2, LOW);
```

```
digitalWrite(3, LOW);
digitalWrite(4, LOW);
digitalWrite(5, LOW);
digitalWrite(6, LOW);
digitalWrite(7, LOW);

digitalWrite(18, HIGH);  //pompa 2 on
digitalWrite(8, HIGH);
digitalWrite(9, LOW);
digitalWrite(10, LOW);
digitalWrite(11, LOW);
digitalWrite(12, LOW);
digitalWrite(13, LOW);
digitalWrite(14, LOW);
digitalWrite(15, LOW);
digitalWrite(20, LOW);
delay(2000);

//mode 2 nyala berurutan dar pin 1 sampai 7, pin 8 sampai 15 dan pin 20 berkedip

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, LOW);
digitalWrite(3, LOW);
digitalWrite(4, LOW);
digitalWrite(5, LOW);
digitalWrite(6, LOW);
digitalWrite(7, LOW);

digitalWrite(18, HIGH);  //pompa 2 on
digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, LOW);
digitalWrite(11, LOW);
digitalWrite(12, LOW);
digitalWrite(13, LOW);
digitalWrite(14, LOW);
digitalWrite(15, LOW);
```

```
digitalWrite(20, LOW);  //pompa 3 off
delay(2000);

digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, LOW);
digitalWrite(4, LOW);
digitalWrite(5, LOW);
digitalWrite(6, LOW);
digitalWrite(7, LOW);

digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, LOW);
digitalWrite(12, LOW);
digitalWrite(13, LOW);
digitalWrite(14, LOW);
digitalWrite(15, LOW);
digitalWrite(20, LOW);
delay(2000);

digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, LOW);
digitalWrite(5, LOW);
digitalWrite(6, LOW);
digitalWrite(7, LOW);

digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, LOW);
digitalWrite(13, LOW);
digitalWrite(14, LOW);
```

```
digitalWrite(15, LOW);
digitalWrite(20, LOW);
delay(2000);

digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, LOW);
digitalWrite(6, LOW);
digitalWrite(7, LOW);

digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
digitalWrite(13, LOW);
digitalWrite(14, LOW);
digitalWrite(15, LOW);
digitalWrite(20, LOW);
delay(2000);

digitalWrite(19, HIGH);  //pompa 4 on
digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, HIGH);
digitalWrite(6, LOW);
digitalWrite(7, LOW);

digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
```

```
digitalWrite(13, HIGH);
digitalWrite(14, LOW);
digitalWrite(15, LOW);
digitalWrite(20, LOW);
delay(2000);

digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, HIGH);
digitalWrite(6, HIGH);
digitalWrite(7, LOW);

digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
digitalWrite(13, HIGH);
digitalWrite(14, HIGH);
digitalWrite(15, LOW);
digitalWrite(20, LOW);
delay(2000);

digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, HIGH);
digitalWrite(5, HIGH);
digitalWrite(6, HIGH);
digitalWrite(7, HIGH);

digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
```

```
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
digitalWrite(13, HIGH);
digitalWrite(14, HIGH);
digitalWrite(15, HIGH);
digitalWrite(20, HIGH);
delay(2500);
digitalWrite(17, LOW);  //pompa 1 off
digitalWrite(18, LOW);  //pompa 2 off
digitalWrite(19, LOW);  //pompa 4 off
digitalWrite(20, LOW);  //pompa 3 off
delay(2000);
digitalWrite(20, HIGH);  //pompa 3 on
delay (2000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(0, HIGH);
delay (1000);
digitalWrite(0, LOW);
delay (1000);
digitalWrite(1, HIGH);
delay (1000);
digitalWrite(1, LOW);
delay (1000);
digitalWrite(2, HIGH);
delay (1000);
digitalWrite(2, LOW);
delay (1000);
digitalWrite(3, HIGH);
delay (1000);
digitalWrite(3, LOW);
delay (1000);
digitalWrite(4, HIGH);
delay (1000);
digitalWrite(4, LOW);
delay (1000);
digitalWrite(5, HIGH);
delay (1000);
digitalWrite(5, LOW);
```

```
delay (1000);
digitalWrite(6, HIGH);
delay (1000);
digitalWrite(6, LOW);
delay (1000);
digitalWrite(7, HIGH);
delay (1000);
digitalWrite(17, LOW);  //pompa 1 off
digitalWrite(7, LOW);
delay (2000);

digitalWrite(8, LOW);
delay (1000);
digitalWrite(18, HIGH);
digitalWrite(9, HIGH);
delay (1000);
digitalWrite(9, LOW);
delay (1000);
digitalWrite(10, HIGH);
delay (1000);
digitalWrite(10, LOW);
delay (1000);
digitalWrite(11, HIGH);
delay (1000);
digitalWrite(11, LOW);
delay (1000);
digitalWrite(12, HIGH);
delay (1000);
digitalWrite(12, LOW);
delay (1000);
digitalWrite(13, HIGH);
delay (1000);
digitalWrite(13, LOW);
delay (1000);
digitalWrite(14, HIGH);
delay (1000);
digitalWrite(14, LOW);
delay (1000);
digitalWrite(15, HIGH);
```

```
  delay (1000);
  digitalWrite(18, LOW);  //pompa 1 off
  digitalWrite(15, LOW);
  delay (2000);

  // mode 3 nyala terus mati bergantian pin 0 sampai 20, kemudian semua nyala
bersamaan

  digitalWrite(17, HIGH);
  digitalWrite(0, HIGH);
  delay (1000);
  digitalWrite(0, LOW);
  delay (1000);
  digitalWrite(1, HIGH);
  delay (1000);
  digitalWrite(1, LOW);
  delay (1000);
  digitalWrite(2, HIGH);
  delay (1000);
  digitalWrite(2, LOW);
  delay (1000);
  digitalWrite(3, HIGH);
  delay (1000);
  digitalWrite(3, LOW);
  delay (1000);
  digitalWrite(4, HIGH);
  delay (1000);
  digitalWrite(4, LOW);
  delay (1000);
  digitalWrite(5, HIGH);
  delay (1000);
  digitalWrite(5, LOW);
  delay (1000);
  digitalWrite(6, HIGH);
  delay (1000);
  digitalWrite(6, LOW);
  delay (1000);
  digitalWrite(7, HIGH);
  delay (1000);
```

```
digitalWrite(17, LOW);   //pompa 1 off
digitalWrite(7, LOW);
delay (2000);

digitalWrite(18, HIGH);   //pompa 2 on
digitalWrite(8, HIGH);
delay (1000);
digitalWrite(8, LOW);
delay (1000);
digitalWrite(9, HIGH);
delay (1000);
digitalWrite(9, LOW);
delay (1000);
digitalWrite(10, HIGH);
delay (1000);
digitalWrite(10, LOW);
delay (1000);
digitalWrite(11, HIGH);
delay (1000);
digitalWrite(11, LOW);
delay (1000);
digitalWrite(12, HIGH);
delay (1000);
digitalWrite(12, LOW);
delay (1000);
digitalWrite(13, HIGH);
delay (1000);
digitalWrite(13, LOW);
delay (1000);
digitalWrite(14, HIGH);
delay (1000);
digitalWrite(14, LOW);
delay (1000);
digitalWrite(15, HIGH);
delay (1000);
digitalWrite(18, LOW);   //pompa 2 off
digitalWrite(15, LOW);
delay (1000);
digitalWrite(20, HIGH);  //pompa 3 on
```

```
digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(18, HIGH);  //pompa 2 on
digitalWrite(19, HIGH);  //pompa 4 on

digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, HIGH);
digitalWrite(5, HIGH);
digitalWrite(6, HIGH);
digitalWrite(7, HIGH);
digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
digitalWrite(13, HIGH);
digitalWrite(14, HIGH);
digitalWrite(15, HIGH);
digitalWrite(20, HIGH);
delay (3000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(18, LOW);  //pompa 2 Off
digitalWrite(19, LOW);  //pompa 4 off

digitalWrite(0, HIGH);
delay (1000);
digitalWrite(0, LOW);
delay (1000);
digitalWrite(1, HIGH);
delay (1000);
digitalWrite(1, LOW);
delay (1000);
digitalWrite(2, HIGH);
delay (1000);
```

```
digitalWrite(2, LOW);
delay (1000);
digitalWrite(3, HIGH);
delay (1000);
digitalWrite(3, LOW);
delay (1000);
digitalWrite(4, HIGH);
delay (1000);
digitalWrite(4, LOW);
delay (1000);
digitalWrite(5, HIGH);
delay (1000);
digitalWrite(5, LOW);
delay (1000);
digitalWrite(6, HIGH);
delay (1000);
digitalWrite(6, LOW);
delay (1000);
digitalWrite(7, HIGH);
delay (1000);
digitalWrite(7, LOW);
delay (1000);

digitalWrite(18, HIGH);  //pompa 2 on
digitalWrite(8, HIGH);
delay (1000);
digitalWrite(8, LOW);
delay (1000);
digitalWrite(9, HIGH);
delay (1000);
digitalWrite(9, LOW);
delay (1000);
digitalWrite(10, HIGH);
delay (1000);
digitalWrite(10, LOW);
delay (1000);
digitalWrite(11, HIGH);
delay (1000);
digitalWrite(11, LOW);
```

```
delay (1000);
digitalWrite(12, HIGH);
delay (1000);
digitalWrite(12, LOW);
delay (1000);
digitalWrite(13, HIGH);
delay (1000);
digitalWrite(13, LOW);
delay (1000);
digitalWrite(14, HIGH);
delay (1000);
digitalWrite(14, LOW);
delay (1000);
digitalWrite(15, HIGH);
delay (1000);
digitalWrite(15, LOW);
delay (1000);
digitalWrite(20, HIGH);

digitalWrite(19, HIGH);  //pompa 4 on
digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, HIGH);
digitalWrite(5, HIGH);
digitalWrite(6, HIGH);
digitalWrite(7, HIGH);
digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
digitalWrite(13, HIGH);
digitalWrite(14, HIGH);
digitalWrite(15, HIGH);
digitalWrite(20, HIGH);
delay (3000);
```

```
digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(18, LOW);  //pompa 2 Off
digitalWrite(19, LOW);  //pompa 4 off

digitalWrite(0, HIGH);
delay (1000);
digitalWrite(0, LOW);
delay (1000);
digitalWrite(1, HIGH);
delay (1000);
digitalWrite(1, LOW);
delay (1000);
digitalWrite(2, HIGH);
delay (1000);
digitalWrite(2, LOW);
delay (1000);
digitalWrite(3, HIGH);
delay (1000);
digitalWrite(3, LOW);
delay (1000);
digitalWrite(4, HIGH);
delay (1000);
digitalWrite(4, LOW);
delay (1000);
digitalWrite(5, HIGH);
delay (1000);
digitalWrite(5, LOW);
delay (1000);
digitalWrite(6, HIGH);
delay (1000);
digitalWrite(6, LOW);
delay (1000);
digitalWrite(7, HIGH);
delay (1000);
digitalWrite(7, LOW);
delay (1000);

digitalWrite(17, HIGH);  //pompa 1 on
```

```
digitalWrite(18, LOW);  //pompa 2 Off
digitalWrite(19, LOW);  //pompa 4 off

digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, HIGH);
digitalWrite(5, HIGH);
digitalWrite(6, HIGH);
digitalWrite(7, HIGH);

digitalWrite(17, LOW);  //pompa 1 off
digitalWrite(18, HIGH);  //pompa 2 ON
digitalWrite(19, LOW);  //pompa 4 off

digitalWrite(8, LOW);
delay (1000);
digitalWrite(9, HIGH);
delay (1000);
digitalWrite(9, LOW);
delay (1000);
digitalWrite(10, HIGH);
delay (1000);
digitalWrite(10, LOW);
delay (1000);
digitalWrite(11, HIGH);
delay (1000);
digitalWrite(11, LOW);
delay (1000);
digitalWrite(12, HIGH);
delay (1000);
digitalWrite(12, LOW);
delay (1000);
digitalWrite(13, HIGH);
delay (1000);
digitalWrite(13, LOW);
delay (1000);
```

```
digitalWrite(14, HIGH);
delay (1000);
digitalWrite(14, LOW);
delay (1000);
digitalWrite(15, HIGH);
delay (1000);
digitalWrite(15, LOW);
delay (1000);
digitalWrite(20, HIGH);
delay (1000);
digitalWrite(20, LOW);
delay (1000);

digitalWrite(7, HIGH);
digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
digitalWrite(13, HIGH);
digitalWrite(14, HIGH);
digitalWrite(15, HIGH);
digitalWrite(20, HIGH);
delay (2000);

digitalWrite(20, LOW);
delay (2000);

digitalWrite(8, LOW);
delay (1000);
digitalWrite(9, HIGH);
delay (1000);
digitalWrite(9, LOW);
delay (1000);
digitalWrite(10, HIGH);
delay (1000);
digitalWrite(10, LOW);
delay (1000);
digitalWrite(11, HIGH);
```

```
delay (1000);
digitalWrite(11, LOW);
delay (1000);
digitalWrite(12, HIGH);
delay (1000);
digitalWrite(12, LOW);
delay (1000);
digitalWrite(13, HIGH);
delay (1000);
digitalWrite(13, LOW);
delay (1000);
digitalWrite(14, HIGH);
delay (1000);
digitalWrite(14, LOW);
delay (1000);
digitalWrite(15, HIGH);
delay (1000);
digitalWrite(15, LOW);
delay (1000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(18, LOW);  //pompa 2 off
digitalWrite(19, LOW);  //pompa 4 off

digitalWrite(0, HIGH);
delay (1000);
digitalWrite(0, LOW);
delay (1000);
digitalWrite(1, HIGH);
delay (1000);
digitalWrite(1, LOW);
delay (1000);
digitalWrite(2, HIGH);
delay (1000);
digitalWrite(2, LOW);
delay (1000);
digitalWrite(3, HIGH);
delay (1000);
digitalWrite(3, LOW);
```

```
delay (1000);
digitalWrite(4, HIGH);
delay (1000);
digitalWrite(4, LOW);
delay (1000);
digitalWrite(5, HIGH);
delay (1000);
digitalWrite(5, LOW);
delay (1000);
digitalWrite(6, HIGH);
delay (1000);
digitalWrite(6, LOW);
delay (1000);
digitalWrite(7, HIGH);
delay (1000);
digitalWrite(7, LOW);
delay (1000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(18, HIGH);  //pompa 2 ON
digitalWrite(19, HIGH);  //pompa 4 on

digitalWrite(0, HIGH);
digitalWrite(1, HIGH);
digitalWrite(2, HIGH);
digitalWrite(3, HIGH);
digitalWrite(4, HIGH);
digitalWrite(5, HIGH);
digitalWrite(5, HIGH);
digitalWrite(6, HIGH);
digitalWrite(7, HIGH);
digitalWrite(8, HIGH);
digitalWrite(9, HIGH);
digitalWrite(10, HIGH);
digitalWrite(11, HIGH);
digitalWrite(12, HIGH);
digitalWrite(13, HIGH);
digitalWrite(14, HIGH);
digitalWrite(15, HIGH);
```

```
digitalWrite(20, HIGH);
delay (3000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(18, LOW);  //pompa 2 Off
digitalWrite(19, LOW);  //pompa 4 off

digitalWrite(0, HIGH);
delay (1000);
digitalWrite(0, LOW);
delay (1000);
digitalWrite(1, HIGH);
delay (1000);
digitalWrite(1, LOW);
delay (1000);
digitalWrite(2, HIGH);
delay (1000);
digitalWrite(2, LOW);
delay (1000);
digitalWrite(3, HIGH);
delay (1000);
digitalWrite(3, LOW);
delay (1000);
digitalWrite(4, HIGH);
delay (1000);
digitalWrite(4, LOW);
delay (1000);
digitalWrite(5, HIGH);
delay (1000);
digitalWrite(5, LOW);
delay (1000);
digitalWrite(6, HIGH);
delay (1000);
digitalWrite(6, LOW);
delay (1000);
digitalWrite(7, HIGH);
delay (1000);
digitalWrite(7, LOW);
delay (1000);
```

```
digitalWrite(8, LOW);
delay (1000);
digitalWrite(18, HIGH);  //pompa 2 On
digitalWrite(9, HIGH);
delay (1000);
digitalWrite(9, LOW);
delay (1000);
digitalWrite(10, HIGH);
delay (1000);
digitalWrite(10, LOW);
delay (1000);
digitalWrite(11, HIGH);
delay (1000);
digitalWrite(11, LOW);
delay (1000);
digitalWrite(12, HIGH);
delay (1000);
digitalWrite(12, LOW);
delay (1000);
digitalWrite(13, HIGH);
delay (1000);
digitalWrite(13, LOW);
delay (1000);
digitalWrite(14, HIGH);
delay (1000);
digitalWrite(14, LOW);
delay (1000);
digitalWrite(15, HIGH);
delay (1000);
digitalWrite(15, LOW);
delay (1000);
digitalWrite(20, LOW);
delay (1000);

digitalWrite(17, HIGH);  //pompa 1 on
digitalWrite(18, HIGH);  //pompa 2 on
digitalWrite(19, HIGH);  //pompa 4 on
```

```
digitalWrite(0, HIGH);    // turn on LED1
delay(500);               // wait for 200ms
digitalWrite(1, HIGH);    // turn on LED1
delay(500);               // wait for 200ms
digitalWrite(2, HIGH);    // turn on LED2
delay(500);               // wait for 200ms
digitalWrite(3, HIGH);    // turn on LED3
delay(500);               // wait for 200ms
digitalWrite(4, HIGH);    // turn on LED4
delay(500);               // wait for 200ms
digitalWrite(5, HIGH);    // turn on LED5
delay(500);               // wait for 200ms
digitalWrite(6, HIGH);    // turn on LED6
delay(500);               // wait for 200ms
digitalWrite(7, HIGH);    // turn on LED7
delay(500);               // wait for 200ms
digitalWrite(8, HIGH);    // turn on LED8
delay(500);               // wait for 200ms
digitalWrite(9, HIGH);    // turn on LED9
delay(500);               // wait for 200ms
digitalWrite(10, HIGH);    // turn on LED10
delay(500);               // wait for 200ms
digitalWrite(11, HIGH);    // turn on LED11
delay(500);               // wait for 200ms
digitalWrite(12, HIGH);    // turn on LED12
delay(500);               // wait for 200ms
digitalWrite(13, HIGH);    // turn on LED13
delay(500);               // wait for 200ms
digitalWrite(14, HIGH);    // turn on LED14
delay(500);               // wait for 200ms
digitalWrite(15, HIGH);    // turn on LED15
delay(500);               // wait for 200ms

digitalWrite(1, LOW);   // turn off LED1
delay(500);               // wait for 300ms
digitalWrite(2, LOW);   // turn off LED2
delay(500);               // wait for 300ms
digitalWrite(3, LOW);   // turn off LED3
delay(500);               // wait for 300ms
```

```
digitalWrite(4, LOW);   // turn off LED4
delay(500);             // wait for 300ms
digitalWrite(5, LOW);   // turn off LED5
delay(500);             // wait for 300ms
digitalWrite(6, LOW);   // turn off LED6
delay(500);             // wait for 300ms
digitalWrite(7, LOW);   // turn off LED7
delay(500);             // wait for 300ms
digitalWrite(8, LOW);   // turn off LED8
delay(500);             // wait for 300ms
digitalWrite(9, LOW);   // turn off LED9
delay(500);             // wait for 300ms
digitalWrite(10, LOW);  // turn off LED10
delay(500);             // wait for 300ms
digitalWrite(11, LOW);  // turn off LED11
delay(500);             // wait for 300ms
 digitalWrite(12, LOW);    // turn off LED12
delay(500);             // wait for 300ms
digitalWrite(13, LOW);     // turn off LED13
delay(500);             // wait for 300ms
digitalWrite(14, LOW);     // turn off LED14
delay(500);             // wait for 300ms
digitalWrite(15, LOW);     // turn off LED15
delay(500);             // wait for 300ms before running program all over again

digitalWrite(0, HIGH);    // turn on LED1
delay(500);             // wait for 200ms
digitalWrite(1, HIGH);    // turn on LED1
delay(500);             // wait for 200ms
digitalWrite(2, HIGH);    // turn on LED2
delay(500);             // wait for 200ms
digitalWrite(3, HIGH);    // turn on LED3
delay(500);             // wait for 200ms
digitalWrite(4, HIGH);    // turn on LED4
delay(500);             // wait for 200ms
digitalWrite(5, HIGH);    // turn on LED5
delay(500);             // wait for 200ms
digitalWrite(6, HIGH);    // turn on LED6
delay(500);             // wait for 200ms
```

```
digitalWrite(7, HIGH);    // turn on LED7
delay(500);               // wait for 200ms
digitalWrite(8, HIGH);    // turn on LED8
delay(500);               // wait for 200ms
digitalWrite(9, HIGH);    // turn on LED9
delay(500);               // wait for 200ms
digitalWrite(10, HIGH);   // turn on LED10
delay(500);               // wait for 200ms
digitalWrite(11, HIGH);   // turn on LED11
delay(500);               // wait for 200ms
digitalWrite(12, HIGH);   // turn on LED12
delay(500);               // wait for 200ms
digitalWrite(13, HIGH);   // turn on LED13
delay(500);               // wait for 200ms
digitalWrite(14, HIGH);   // turn on LED14
delay(500);               // wait for 200ms
digitalWrite(15, HIGH);   // turn on LED15
delay(500);               // wait for 200ms

digitalWrite(1, LOW);   // turn off LED1
delay(500);             // wait for 300ms
digitalWrite(2, LOW);   // turn off LED2
delay(500);             // wait for 300ms
digitalWrite(3, LOW);   // turn off LED3
delay(500);             // wait for 300ms
digitalWrite(4, LOW);   // turn off LED4
delay(500);             // wait for 300ms
digitalWrite(5, LOW);   // turn off LED5
delay(500);             // wait for 300ms
digitalWrite(6, LOW);   // turn off LED6
delay(500);             // wait for 300ms
digitalWrite(7, LOW);   // turn off LED7
delay(500);             // wait for 300ms
digitalWrite(8, LOW);   // turn off LED8
delay(500);             // wait for 300ms
digitalWrite(9, LOW);   // turn off LED9
delay(500);             // wait for 300ms
digitalWrite(10, LOW);  // turn off LED10
delay(500);             // wait for 300ms
```

```
  digitalWrite(11, LOW);  // turn off LED11
  delay(500);              // wait for 300ms
   digitalWrite(12, LOW);   // turn off LED12
  delay(500);              // wait for 300ms
  digitalWrite(13, LOW);    // turn off LED13
  delay(500);              // wait for 300ms
  digitalWrite(14, LOW);    // turn off LED14
  delay(500);              // wait for 300ms
  digitalWrite(15, LOW);    // turn off LED15
  delay(500);              // wait for 300ms before running program all over again

  digitalWrite(17, LOW);  //pompa 1 off
  digitalWrite(18, LOW);  //pompa 2 off
  digitalWrite(19, LOW);  //pompa 4 off
}
```