

```

void setup()
{
pinMode(2,OUTPUT);
pinMode(3,OUTPUT);
pinMode(4,OUTPUT);
pinMode(8,INPUT);
}

void loop()
{
  if (digitalRead(8)== 0)
  {
    //-----State 1 = 001 -----
    digitalWrite(2,1); // LED ON
    digitalWrite(3,0); // LED ON
    digitalWrite(4,0); // LED ON
    delay(500);        // delay 500 ms
    //-----State 2 = 001 -----
    digitalWrite(2,0); // LED OFF
    digitalWrite(3,1); // LED OFF
    digitalWrite(4,0); // LED OFF
    delay(500);        // delay 500 ms
    //-----State 3 = 001 -----
    digitalWrite(2,0);
    digitalWrite(3,0);
    digitalWrite(4,1);
    delay(500);        // delay 500 ms
    //-----State 4 = 000 -----
    digitalWrite(2,0);
    digitalWrite(3,0);
    digitalWrite(4,0);
    delay(500);        // delay 500 ms
  }
  //=====
  else
  {
    //-----State 5 = 001 -----
    digitalWrite(2,0);
    digitalWrite(3,0);
    digitalWrite(4,1);
    delay(500);        // delay 500 ms
    //-----State 6 = 001 -----
    digitalWrite(2,0);
    digitalWrite(3,1);
    digitalWrite(4,0);
    delay(500);        // delay 500 ms
    //-----State 7 = 001 -----
    digitalWrite(2,1);
    digitalWrite(3,0);
    digitalWrite(4,0);
  }
}

```

```
delay(500);          // delay 500 ms
//-----State 8 = 010 -----
digitalWrite(2,0);
digitalWrite(3,0);
digitalWrite(4,0);
delay(500);          // delay 500 ms
}
//=====
}
```