

```

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

void loop()
{
  if (digitalRead(8) == 0)
  {
    //-----State 1 = 100 -----
    digitalWrite(2, 1);
    digitalWrite(3, 0);
    digitalWrite(4, 0);
    delay(500);          // delay 500 ms
    //-----State 2 = 010 -----
    digitalWrite(2, 0);
    digitalWrite(3, 1);
    digitalWrite(4, 0);
    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 = 010 -----
    digitalWrite(2,0);
    digitalWrite(3,1);
    digitalWrite(4,0);
    delay(500);          // delay 500 ms
    //-----State 7 = 100 -----
    digitalWrite(2,1);
    digitalWrite(3,0);
    digitalWrite(4,0);
    delay(500);          // delay 500 ms
    //-----State 8 = 000 -----
    digitalWrite(2,0);
    digitalWrite(3,0);
    digitalWrite(4,0);
    delay(500);          // delay 500 ms
}
//=====
}

```