

```

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
}
//=====
```

}