

```

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

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

    //=====//
    else

```

```

{
    //-----state 5 = 001 -----
digitalWrite(2,0); // LED OFF
    digitalWrite(3,0); // LED OFF
    digitalWrite(4,1); // LED OFF
    delay(500); // delay 500 ms
    //-----state 6 = 010 -----
digitalWrite(2,0); // LED OFF
    digitalWrite(3,1); // LED OFF
    digitalWrite(4,0); // LED OFF
    delay(500); // delay 500 ms
    //-----state 7 = 100 -----
digitalWrite(2,1); // LED OFF
    digitalWrite(3,0); // LED OFF
    digitalWrite(4,0); // LED OFF
    delay(500); // delay 500 ms
    //-----state 8 = 000 -----
digitalWrite(2,0); // LED OFF
    digitalWrite(3,0); // LED OFF
    digitalWrite(4,0); // LED OFF
    delay(500); // delay 500 ms
    //-----state 3 = 000 -----
}

//=====
}

```