

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

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);
}

//-----
else
{
    delay (500);          // delay 500 ms
    //-----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  
}  
//-----  
}
```