

```
void setup()
```

```
{
```

```
  pinMode(2, OUTPUT);
```

```
  pinMode(3, OUTPUT);
```

```
  pinMode(4, OUTPUT);
```

```
  pinMode(8, INPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
  if(digitalRead(8)==0)
```

```
  {
```

```
    //----- State 1 -----
```

```
    digitalWrite(2,1);
```

```
    digitalWrite(3,0);
```

```
    digitalWrite(4,0);
```

```
    delay(500);           // delay 500 ms
```

```
    //----- State 2 -----
```

```
    digitalWrite(2,0);
```

```
    digitalWrite(3,1);
```

```
    digitalWrite(4,0);
```

```
    delay(500);           // delay 500 ms
```

```
    //----- State 3 -----
```

```
    digitalWrite(2,0);
```

```
    digitalWrite(3,0);
```

```
    digitalWrite(4,1);
```

```

    delay(500);                // delay 500 ms

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

//=====
=====

else
{
    //----- State 5 -----
    digitalWrite(2,0);
    digitalWrite(3,0);
    digitalWrite(4,1);
    delay(500);                // delay 500 ms
    //----- State 6 -----
    digitalWrite(2,0);
    digitalWrite(3,1);
    digitalWrite(4,0);
    delay(500);                // delay 500 ms
    //----- State 7 -----
    digitalWrite(2,1);
    digitalWrite(3,0);

```

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

```
}
```

```
}
```