Potentiometer Module Experiment

Potentiometers should be familiar to everyone, which are used to adjust the volume of fans and stereos in our homes. The principle of the potentiometer is to change the access resistance to change the distributed voltage. We change the flashing frequency of the lamp at port 13 by reading the voltage output via the potentiometer.

Required components:
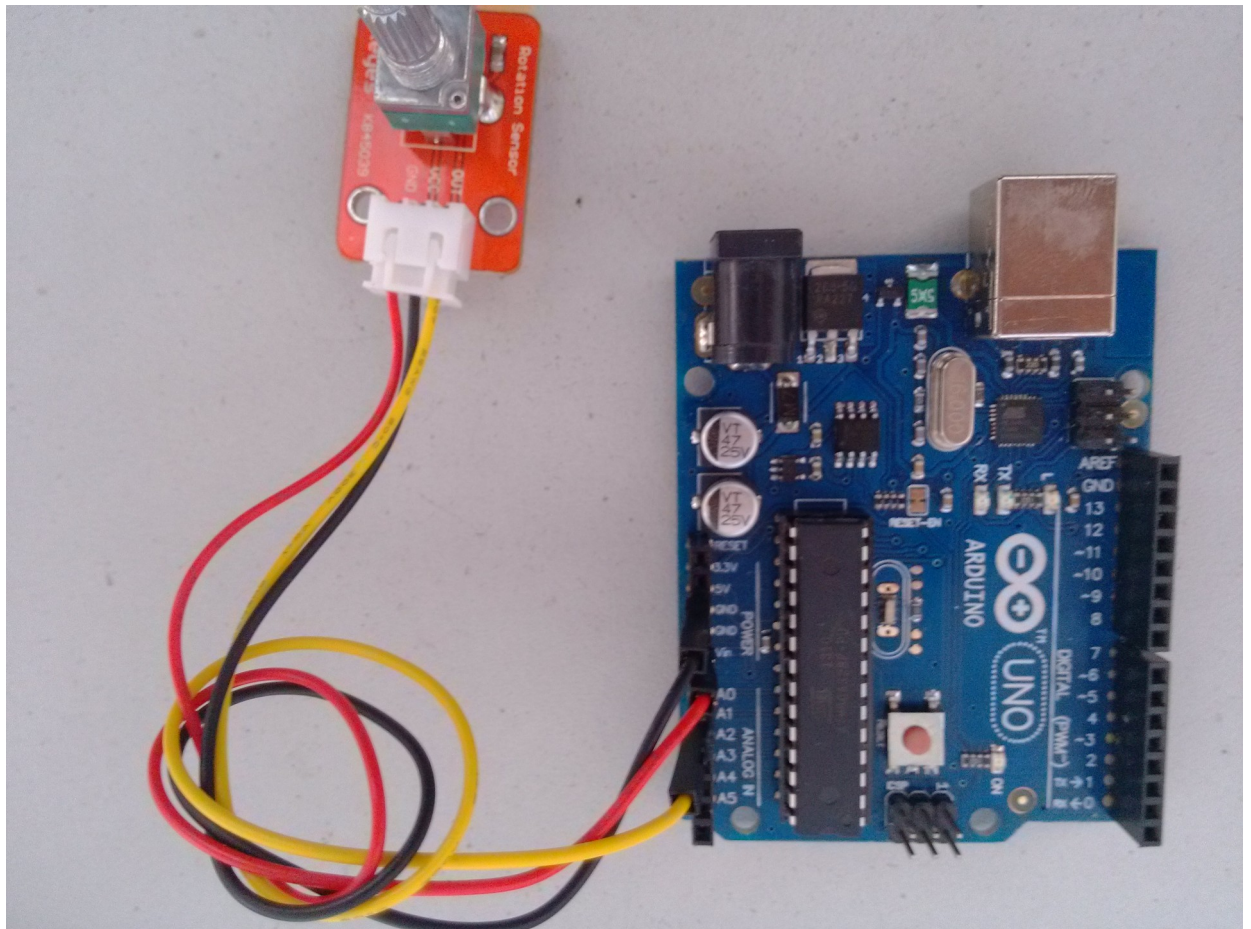A potentiometer module;
A UNO R3 main board
Wires

Product Connection Diagram:
GND-GND
VCC-5V
OUT-A0;

Program:
int Led=13;//Define LED port
int R=A0;//Potentiometer input port
int val;//define digital variable val

```
void setup()
{
pinMode(Led,OUTPUT);//Define LED as the output port
pinMode(R,INPUT); //Define the potentiometer port as analog input
}
void loop()
{
val=1023-analogRead(R);//Read the value of digital port 3 and assign it to val
delay(val);
digitalWrite(Led,HIGH);
delay(val);
digitalWrite(Led,LOW);
}
```

Run the program and rotate the potentiometer, and the flashing frequency of the lamp at port 13 is changing.