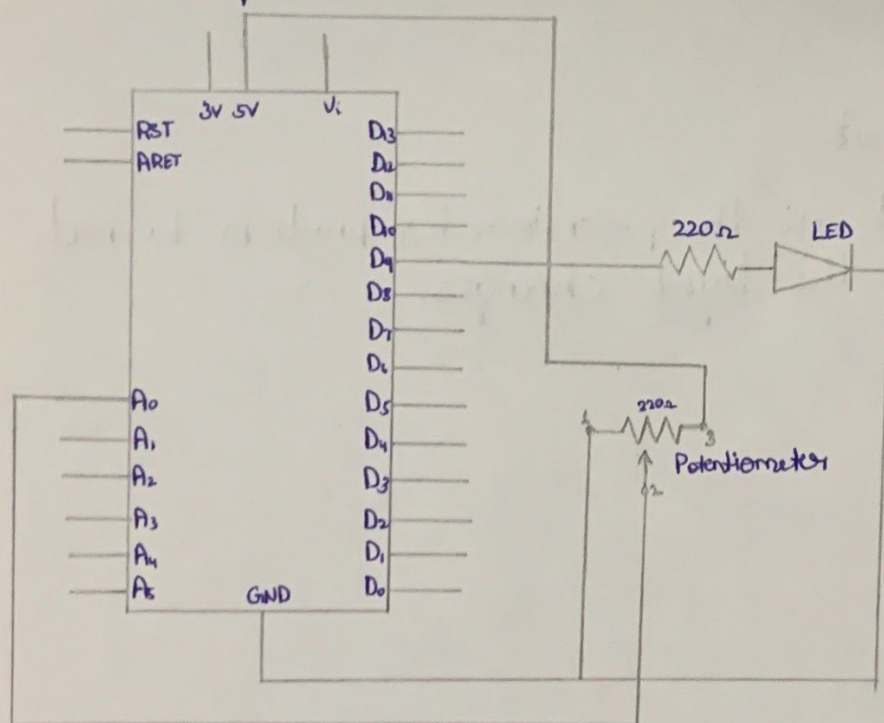Title: Potentiometer LED

Aim: To adjust the lighting brightness with potentiometer.

Hardware Required: Arduino Board, Resistor, Potentiometer, Wires, LED
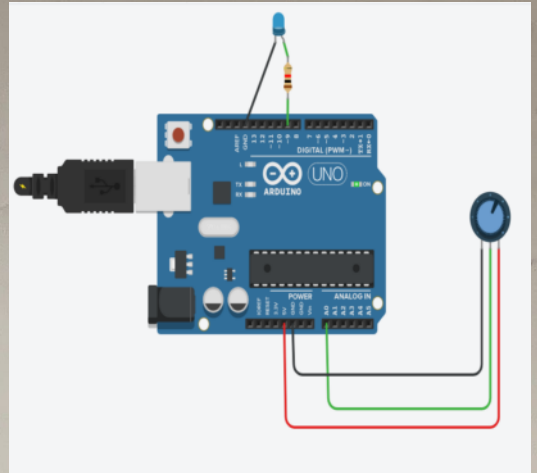
Circuit Diagram:

Code:

```
int ledPin = 9;
void setup()
{
    Serial.begin (9600);
    pinMode (ledPin, OUTPUT);
}
void loop()
{
    int analogValue = analogRead (A0);
    int brightness = map (analogValue, 0, 1023, 0, 255);
```

```
analogWrite (ledPin, brightness);
Serial.print ("Analog : ");
Serial.print (analogvalue);
Serial.print (", Brightness: ");
Serial.print (brightness);
delay (100);
}
```


Observation / Output:

We can see that as the potentiometer knob is turned,
the brightness of the light changes.