

Program no 03

Program Title: POTENTIOMETER-LED

Aim

To demonstrate brightness of LED according to Potentiometer resistance

Hardware Required

- Arduino Board
- Led Light
- 1 ohm resistor
- 1 Potentiometer

Circuit Diagram -

Potentiometer Saved

Code Start Simulation Export Share

Text 1 (Arduino Uno R3)

```
1 //potentiometer
2 void setup()
3 { Serial.begin(9600);
4   pinMode(9, OUTPUT);
5 }
6
7 void loop()
8 {
9   int analog=analogRead(A0);
10  int brightness=map(analog,0,1023,0,255);
11  analogWrite(9,brightness);
12  Serial.print("\n analog value");
13  Serial.print(analog);
14  Serial.print("\n brightness value");
15  Serial.print(brightness);
16 }
```

Serial Monitor

Code Stop Simulation Export Share

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Serial Monitor

Potentiometer Saved

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Serial Monitor

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}  
  
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}
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Observation /Output:

Simulator time: 00:00:03

Code Stop Simulation Export Share

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Serial Monitor

Potentiometer

Simulator time: 00:00:07

Code Stop Simulation Export Share

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Serial Monitor

Potentiometer