UNIVERSITY OF INFORMATION TECHNOLOGY & SCIENCES

(UITS)

ASSIGNMENT
on
INTERNET OF THINGS LAB

Submitted To

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Submitted By

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Department	CSE
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Semester	Autumn 2024
Batch	50
Section	7B1
Subject Code	CSE 402
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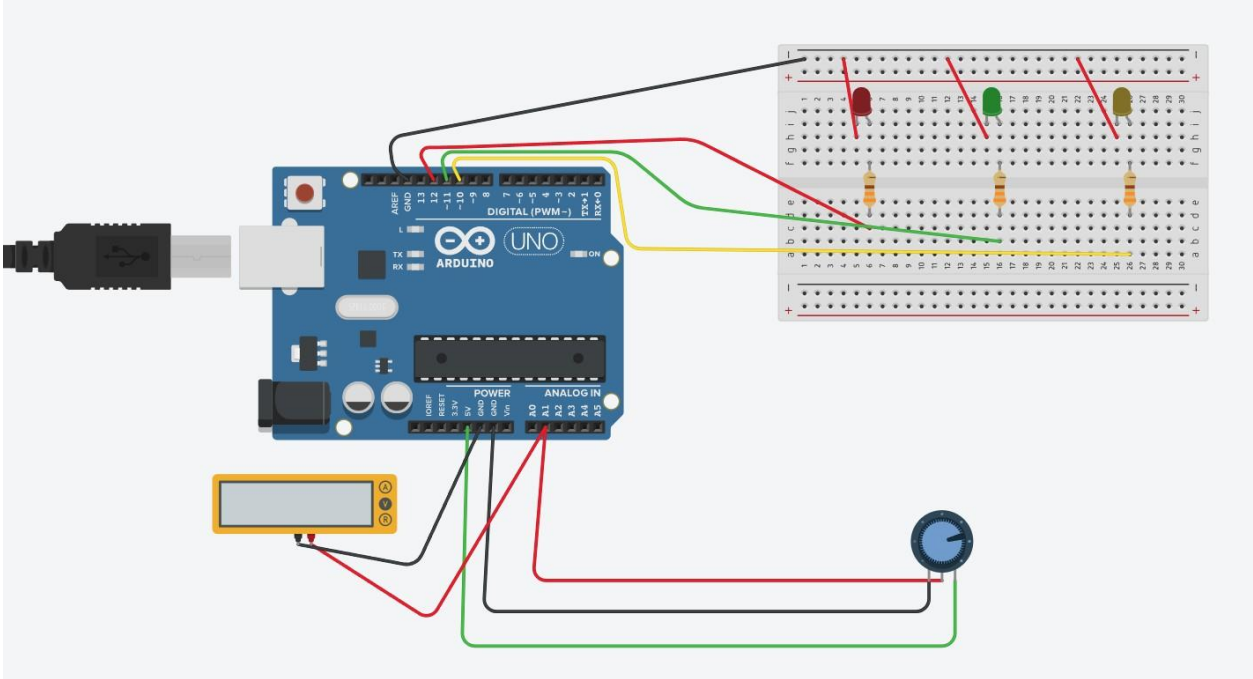
Signature

Analog Input- Digital Output

Title: Analog Input (Potentiometer) Digital Output (LED blink)

Necessary Equipment:

1. Arduino UNO R3
2. Breadboard
3. 330 Ohm resistor
4. 3 LED
5. Potentiometer
6. Multimeter



Code:

```
int  LED_RED=12;
int LED_GREEN=11;
int LED_YELLOW=10;

void setup()
{
  pinMode(LED_RED, OUTPUT);
```

```
  pinMode(LED_GREEN, OUTPUT);
  pinMode(LED_YELLOW, OUTPUT);
  pinMode(A1, INPUT);
  Serial.begin(9600);
 }
 void loop()
 {
  float analogval=analogRead(A1);
  float volt= (5*analogval)/1023;
  Serial.println(volt);
  delay(1000);

  if(volt<3.3 && volt>=3){
   digitalWrite(LED_RED,HIGH);
   digitalWrite(LED_GREEN,LOW);
   digitalWrite(LED_YELLOW,LOW);
  }

  else if(volt>=2 && volt <3){
   digitalWrite(LED_RED,LOW);
   digitalWrite(LED_GREEN,LOW);
   digitalWrite(LED_YELLOW,HIGH);
  }
  else if(volt <2){
   digitalWrite(LED_RED,LOW);
   digitalWrite(LED_GREEN,HIGH);
   digitalWrite(LED_YELLOW,LOW);
  }
  else{
   digitalWrite(LED_RED,LOW);
   digitalWrite(LED_GREEN,LOW);
   digitalWrite(LED_YELLOW,LOW);
  }
}
```