IoT

Lab 3

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Q1

#define LED\_PIN 9

void setup()

{

pinMode(LED\_PIN, OUTPUT);

}

void loop()

{

for(int i = 0; i<=255; i+=7){

analogWrite(LED\_PIN, i);

delay(25);

}

for(int i = 255; i >=0; i-=5){

analogWrite(LED\_PIN, i);

delay(25);

}

}

q2

#define LED\_PIN 9

void setup()

{

pinMode(LED\_PIN, OUTPUT);

}

void loop()

{

int brightness = analogRead(A0);

brightness = map(brightness, 0, 1023, 0, 255);

analogWrite(LED\_PIN, brightness);

}

q3

#define TMP36\_PIN A0

void setup()

{

Serial.begin(9600);

}

void loop()

{

int temperature = analogRead(TMP36\_PIN);

temperature = map(temperature, 0, 1023, 0, 5000);

float celsius = ((float)temperature - 500) / 10;

Serial.println(celsius);

//delay(10000);

}