

Program no: 4

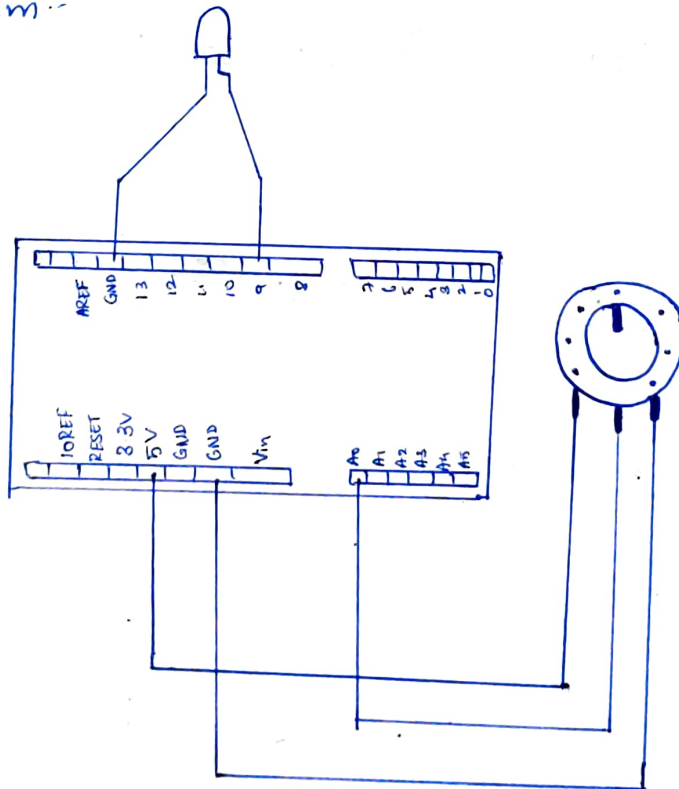
Program Title: LED Fading

Aim :- To demonstrate fading of LED using potentiometer.

Circuit Hardware :-

- 1) Arduino Uno board
- 2) potentiometer
- 3) LED
- 4) connecting wires

Circuit diagram:-



Code:

void setup()

{

Serial.begin(9600);
pinMode(9, OUTPUT);

}

void loop

{

int analog = analogRead(A0);
int bright = map(analog, 0, 1023, 0, 255);
analogWrite(9, bright);
Serial.print("In analog value");
Serial.print(analog);
Serial.print("In brightness value");
Serial.print(bright);

}

Observation/output:

Initially the value of analog and brightness is zero. As the potentiometer is turned up the analog and brightness values increase accordingly the max brightness value is 255.