

## IOT LAB 5TH SEM

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Program no-03

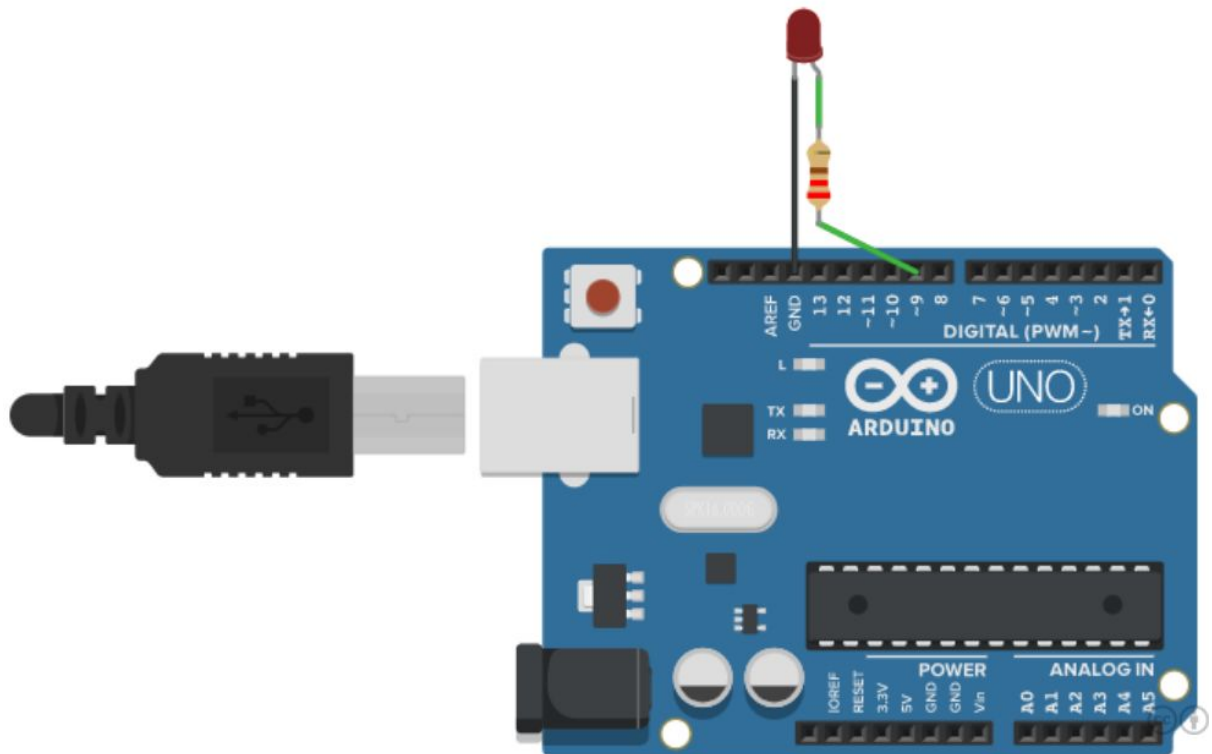
Program Title -FADING LED

Aim- to fade a led bulb on and off using arduino board

### Hardware Required

- Arduino uno Board
- led bulb
- resistors(100 ohm)

### Circuit Diagram



## Code:

```
int brightness=0;

void setup(){
  pinMode(9,OUTPUT);
}

void loop() {
  for(brightness=0;brightness<=255;brightness+=5 ){
    analogWrite(9,brightness);
    delay(30); //wait 30ms
  }
  for(brightness=255;brightness>=0;brightness-=5){
    analogWrite(9,brightness);
    delay(30);
  }
}
```

**Observation /Output-** the led bulb was faded on and off with a delay of 30ms