Program no : 04
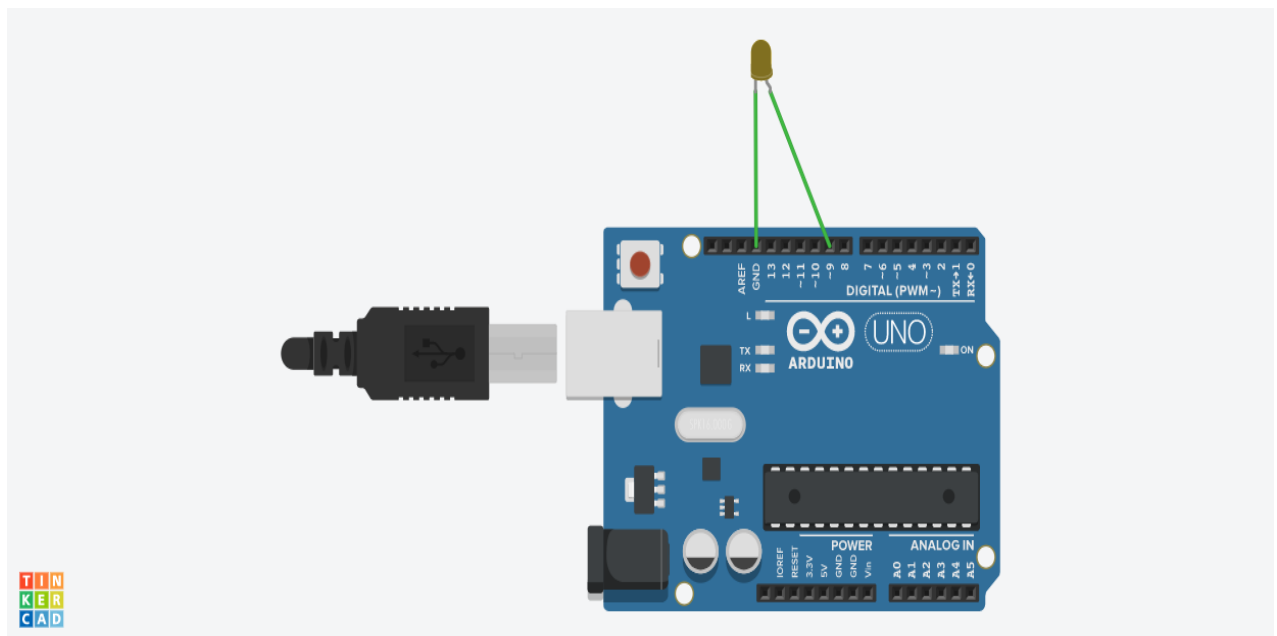
Program Title : LED Fading

Hardware Required :

- Arduino Board
- Wires
- LED

Circuit Diagram :

Code:

```
1  int brightness=0;
2  void setup(){
3    pinMode(9,OUTPUT);
4  }
5
6  void loop()
7  {
8    for(brightness=0; brightness<=255; brightness+=10)
9    {
10     analogWrite(9,brightness);
11     delay(40);
12   }
13   for(brightness=255; brightness>=0; brightness-=10)
14   {
15     analogWrite(9,brightness);
16     delay(40);
17   }
18 }
```

Observation /Output :

Simulator time: 00:00:06