

# ASSIGNMENT-III

## AIM:

To write a python code for blinking LED and Traffic Lights for Raspberry Pi.

## SOFTWARE USED:

Python IDLE 3.10.7 (64 bit)

## PROGRAM:

```
import turtle
import time

wn=turtle.getscreen()
wn.title("Traffic Light")
wn.bgcolor("black")
pen=turtle.Turtle()
pen.color("Yellow")
pen.width(4)
pen.hideturtle()
pen.penup()
pen.goto(-30,60)
pen.pendown()
pen.fd(60)
pen.rt(90)
pen.fd(120)
pen.rt(90)
pen.fd(60)
pen.rt(90)
pen.fd(120)

red_light=turtle.Turtle()
red_light.shape("circle")
red_light.color("grey")
red_light.penup()
red_light.goto(0,40)

yellow_light=turtle.Turtle()
yellow_light.shape("circle")
yellow_light.color("grey")
yellow_light.penup()
yellow_light.goto(0,0)
```

```
green_light=turtle.Turtle()  
green_light.shape("circle")  
green_light.color("grey")  
green_light.penup()  
green_light.goto(0,-40)
```

```
while True:
```

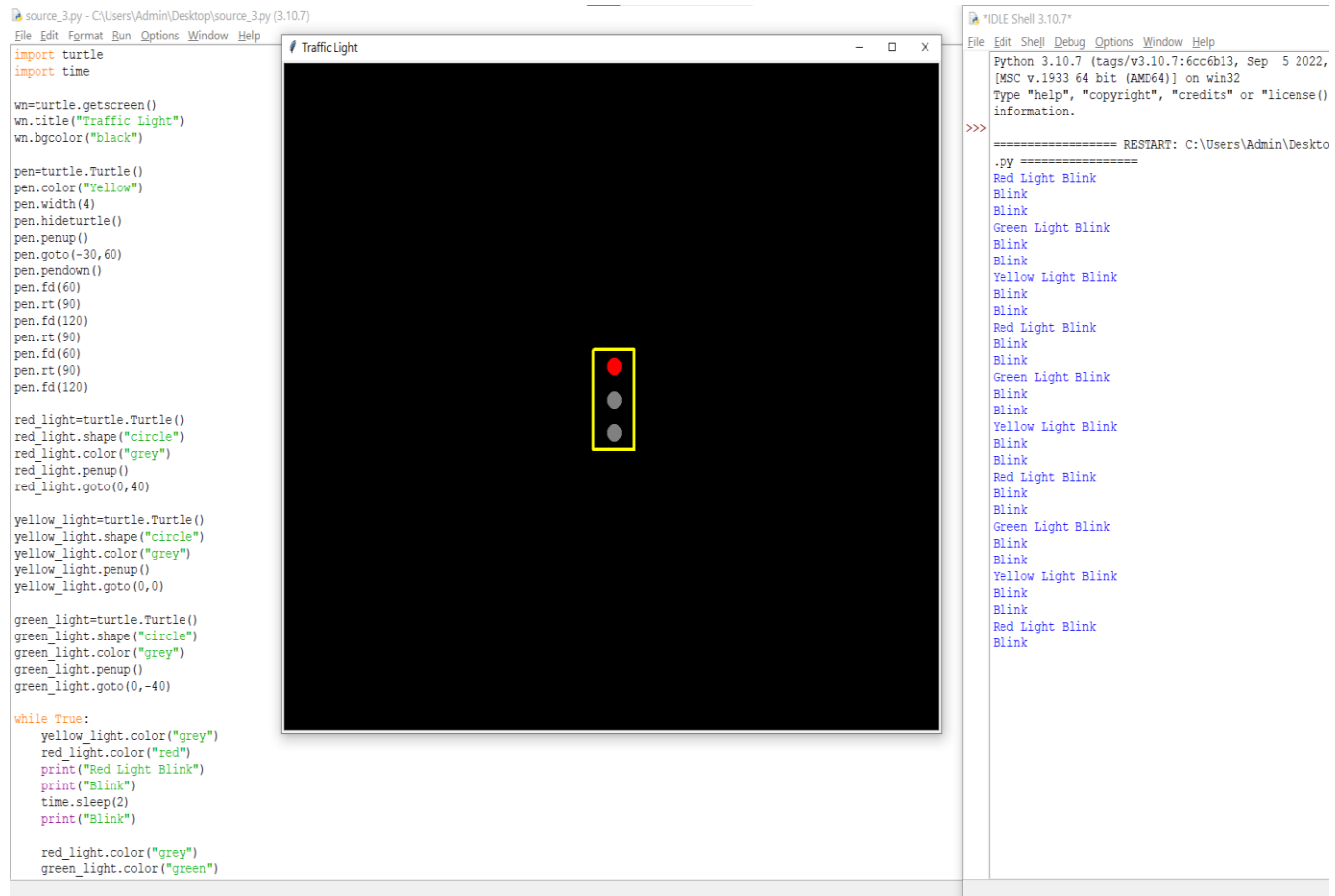
```
    yellow_light.color("grey")  
    red_light.color("red")  
    print("Red Light Blink")  
    print("Blink")  
    time.sleep(2)  
    print("Blink")
```

```
    red_light.color("grey")  
    green_light.color("green")  
    print("Green Light Blink")  
    print("Blink")  
    time.sleep(3)  
    print("Blink")
```

```
    green_light.color("grey")  
    yellow_light.color("yellow")  
    print("Yellow Light Blink")  
    print("Blink")  
    time.sleep(2)  
    print("Blink")
```

```
wn.mainloop()
```

## SIMULATION OUTPUT:



```
source_3.py - C:\Users\Admin\Desktop\source_3.py (3.10.7)
File Edit Format Run Options Window Help

import turtle
import time

wn=turtle.getscreen()
wn.title("Traffic Light")
wn.bgcolor("black")

pen=turtle.Turtle()
pen.color("yellow")
pen.width(4)
pen.hideturtle()
pen.penup()
pen.goto(-30,60)
pen.pendown()
pen.fd(60)
pen.rt(90)
pen.fd(120)
pen.rt(90)
pen.fd(60)
pen.rt(90)
pen.fd(120)

red_light=turtle.Turtle()
red_light.shape("circle")
red_light.color("grey")
red_light.penup()
red_light.goto(0,40)

yellow_light=turtle.Turtle()
yellow_light.shape("circle")
yellow_light.color("grey")
yellow_light.penup()
yellow_light.goto(0,0)

green_light=turtle.Turtle()
green_light.shape("circle")
green_light.color("grey")
green_light.penup()
green_light.goto(0,-40)

while True:
    yellow_light.color("grey")
    red_light.color("red")
    print("Red Light Blink")
    print("Blink")
    time.sleep(2)
    print("Blink")

    red_light.color("grey")
    green_light.color("green")
```

```
*IDLE Shell 3.10.7*
File Edit Shell Debug Options Window Help

Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022,
[MSC v.1933 64 bit (AMD64)]) on win32
Type "help", "copyright", "credits" or "license()"
>>>
===== RESTART: C:\Users\Admin\Desкто
.py =====
Red Light Blink
Blink
Blink
Green Light Blink
Blink
Yellow Light Blink
Blink
Red Light Blink
Blink
Green Light Blink
Blink
Yellow Light Blink
Blink
Red Light Blink
Blink
Green Light Blink
Blink
Yellow Light Blink
Blink
Red Light Blink
Blink
```

## RESULT:

Thus, I have successfully compiled a python code for blinking LED and Traffic Lights for Raspberry Pi.