

Date	30 September 2022
Student Name	AFREEN . J
Student Register Number/Roll Number	211419106012 / 2019PECEC106
Maximum Marks	2 Marks

ASSIGNMENT – 3

Write python code for blinking LED and Traffic lights for Raspberry pi. Only python code is enough, no need to execute in raspberry pi. Note: you are allowed to use web search and complete the assignment

CODE:

```
import turtle

import time

wn= turtle.getscreen()

wn.title("Stoplight By AFREEN.J")

wn.bgcolor("black")


#gui interfrace

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
```

```
red_light =turtle.Turtle()
```

```
red_light.shape("circle")
```

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

```
red_light.penup()
```

```
red_light.goto(0, 40)
```

```
#Yellow light
```

```
yellow_light =turtle.Turtle()
```

```
yellow_light.shape("circle")
```

```
yellow_light.color("grey")
```

```
yellow_light.penup()
```

```
yellow_light.goto(0, 0)
```

```
#Green light
```

```
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 Blinked - Now vehicle Stop behind zebra cross..")
```

```
    print("Blink!!")
```

```
    time.sleep(2)
```

```
    print("Blink!!")
```

```
red_light.color("grey")

green_light.color("green")

print("Green light on- Now vehicle can go..")

print("Blink!!")

time.sleep(3)

print("Blink!!")


green_light.color("grey")

yellow_light.color("yellow")

print("Yellow light Blinked- Now vehicle Ready to go..")

print("Blink!!")

time.sleep(1)

print("Blink!!")
wn.mainloop()
```

OUTPUT:

IDLE Shell 3.10.7

File Edit Shell Debug Options Window Help

Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>

=====
Red light Blinked - Now vehicle Stop behind zebra cross..
Blink!!

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IDLE Shell 3.10.7

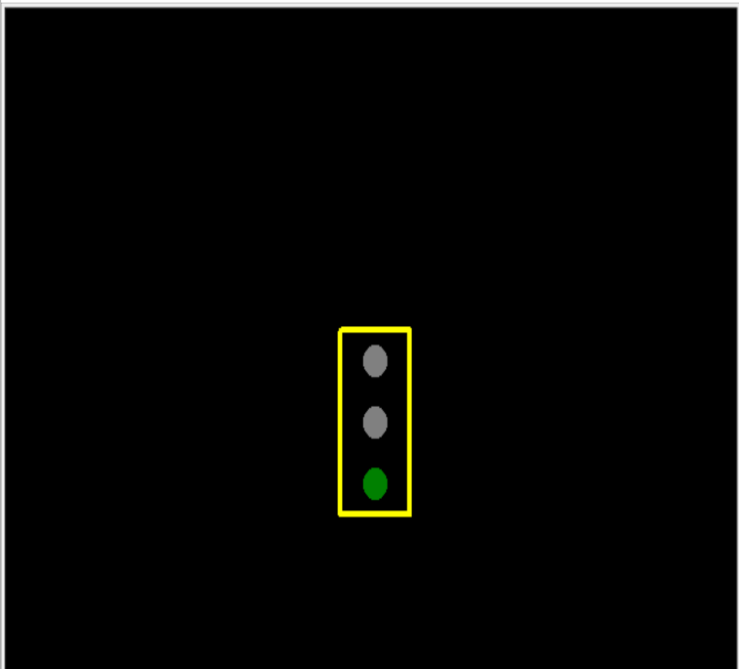
File Edit Shell Debug Options Window Help

Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>

```
=====
Red light Blinked - Now vehicle Stop behind zebra cross..
Blink!!
Blink!!
Green light on- Now vehicle can go..
Blink!!
```

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IDLE Shell 3.10.7

File Edit Shell Debug Options Window Help

Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>

```
=====
Red light Blinked - Now vehicle Stop behind zebra cross..
Blink!!
Blink!!
Green light on- Now vehicle can go..
Blink!!
Blink!!
Yellow light Blinked- Now vehicle Ready to go..
Blink!!
```

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