

Assignment -3
Python Programming

Assignment Date	30September 2022
Student Name	GAYATRI PADMA SREE
Student Roll Number	211419106086
Maximum Marks	2 Marks

Question:

1. 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:

#Traffic light for raspberry pi simulating in python with GUI

```
import turtle
```

```
import time
```

```
wn= turtle.getscreen()
```

```
wn.title("Stoplight By gayatri padmasri")
```

```
wn.bgcolor("black")
```

```
#guiinterfrace
```

```
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)

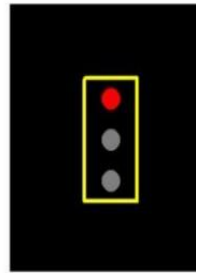
    print("Blink!!")


wn.mainloop()
```

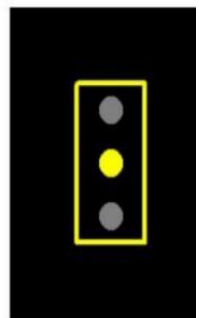
Output Screenshot:

OUTPUT WITH GUI INTERFACE

```
C:\WINDOWS\py.exe  
Red light Blinked - Now vehicle Stop behind zebra cross..  
Blink!!
```



```
C:\WINDOWS\py.exe  
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!!
```



```
Green light on- Now vehicle can go..  
Blink!!
```

