

Assignment -3
Python Programming

Assignment Date	30September 2022
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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 kiruthika")

wn.bgcolor("black")


#guiinterface

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)

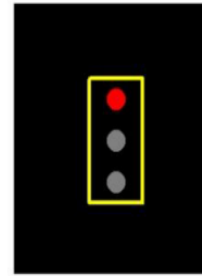
    print("Blink!!")


wn.mainloop()
```

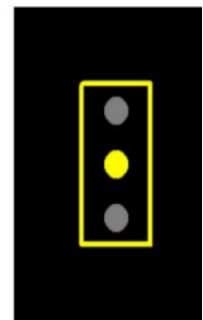
Output Screenshot:

OUTPUT WITH GUI INTERFACE

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



```
C:\WINDOWS\spy.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!!
```

