Assignment -3

Python Programming

Assignment Date	30 September 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

```python
import turtle

import time

wn= turtle.getscreen()

wn.title("Stoplight By kiruthika")

wn.bgcolor("black")


#gui interfrace

pen= turtle.Turtle()

pen.color("Yellow")

pen.width(4)

pen.hideturtle()

pen.penup()

pen.goto(-30, 60)
```

```python
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")
```

```python
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..")
```

```python
    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()
```
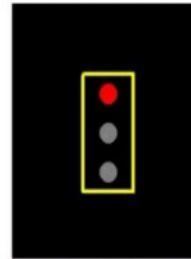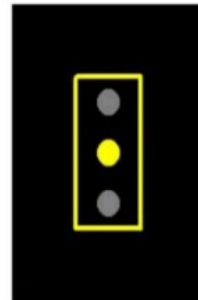
Output Screenshot:

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!!
```