

Assignment - 3
Python Programming

Assignment Date	03 October 2022
Student Name	Ms. SAKTHI.P
Student Roll Number	953419106044
Maximum Marks	2 Marks

Question-1:

Write a Python code for blinking LED and Traffic lights for Raspberry Pi.

Solution :

#traffic light for raspberry pi simulating in pycharm with GUI

```
import turtle
```

```
import time
```

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

```
wn.title("Stoplight By Divyamarlin")
```

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

```
#gui interface
```

```
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, -40)

#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 with GUI Interface

