

Assignment -3

Blinking LED and Traffic Lights

Question-1:

Write python code for blinking LED and Traffic lights for Raspberry pi.

Solution:

```
#traffic light for raspberry pi simulating in pycharm with GUI
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```
import turtle
import time
wn= turtle.getscreen()
wn.title("Stoplight By Gogulkrish")
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")
```

```

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()

```

```

Red light Blinked - NOw vehicle Stop behind zebra cross..
Blink

```



```

Red light Blinked - NOw vehicle Stop behind zebra cross..
Blink
Blink
Green light on- Now vehicle can go..
Blink
Blink
Yello light Blinked- Now vehicle Ready to go..
Blink

```



```

Red light Blinked - NOw vehicle Stop behind zebra cross..
Blink
Blink
Green light on- Now vehicle can go..
Blink
Blink
Yello light Blinked- Now vehicle Ready to go..
Blink
Green link on- Now vehicle can go..
Blink

```

