

### Assignment -3

Assignment Date	07 October 2022
Student Name	Mr. R.Prem kumar
Student Roll Number	621319106070
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.

#### Solution:

```
#traffic light for raspberry pi simulating in pycharm with GUI
```

```
import turtle
```

```
import time
```

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

```
wn.title("PremKumar")
```

```
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, 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()
```

