**Assignment -3**

**Python Programming**

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| Assignment Date | 30 September 2022 |
| Student Name | Akshaya E |
| Student Roll Number | 211419106021 |
| 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")

#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")

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:

