ASSIGNMENT – 3

PYTHON

PROGRAMMING

Question:

Write python code for blinking LED and Traffic lights for

Raspberry pi.

Blinking Led:

```
Import RPI.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(7, GPIO.OUT, initial=GPIO.LOW)

 while True:

        GPIO.output(7, GPIO.HIGH)

        print("LED on")

        sleep (1)

        GPIO.output(7, GPIO.LOW)

        print("LED

        off")sleep(1)
```

Traffic Light:

```
import RPi.GPIO as GPIO

import time

try:

deflightTraffic (led1, led2, led3, delay):
```

```
GPIO.output(led1, 1)Print("GREEN") time.sleep(delay)

GPIO.output(led1, 0)

GPIO.output(led2, 1) Print("YELLOW")

time.sleep(delay)

GPIO.output(led2, 0) GPIO.output(led3, 1)

Print("RED") time.sleep(delay)

OGPIO.output(led3, 0)

GPIO.setmode(GPIO.BCM) button 19

GPIO.setup(button, GPIO.IN, pull_up_down-GPIO.PUD_UP)

ledGreen - 16

led Yellow 12

ledRed-23

GPIO.setup(ledGreen, GPIO.OUĽ)

GPIO.setup(led Yellow, GPIO.OUĽ)

GPIO.setup(ledRed, GPIO.OUĽ) while true:

input_state= GPIO.input(button)

if input state-False:

print('Button Pressed') light Traffic(ledGreen, led Yellow, ledRed,1)else:

GPIO.output(led Green, 0)

GPIO.output(ledYellow, 0) GPIO.output(ledRed, 0)except

KeyboardInterrupt:

print "You've exited the program"

finally:

GPIO.cleanup()
```