# Assignment -3

*Python Programming*

| Assignment Date | 4 October 2022 |
|---|---|
| Student Name | SARANYA S |
| Student Roll Number | 110719106031 |
| Maximum Marks | 2 Marks |

**Question-1:**

Write python code for blinking LED for Raspberry pi?

**Solution:**

```
import RPi.GPIO as GPIO from

time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)  GPIO.setup(8,

GPIO.OUT, initial=GPIO.LOW)  while True:

GPIO.output(8, GPIO.HIGH)

sleep(1)

GPIO.output(8, GPIO.LOW)

sleep(1)
```

**Question-2:**

Write python code for Traffic lights for Raspberry pi

**Solution:**

```python
import RPi.GPIO as GPIO
import time

try:
    deflightTraffic(led1, led2, led3, delay ):
        GPIO.output(led1, 1)
        time.sleep(delay)
        GPIO.output(led1, 0)
        GPIO.output(led2, 1)
        time.sleep(delay)
        GPIO.output(led2, 0)
        GPIO.output(led3, 1)
        time.sleep(delay)
        GPIO.output(led3, 0)
    GPIO.setmode(GPIO.BCM)
    button = 19
    GPIO.setup(button, GPIO.IN, pull_up_down=GPIO.PUD_UP)
    ledGreen = 16  ledYellow = 12  ledRed = 23
    GPIO.setup(ledGreen, GPIO.OUT)
    GPIO.setup(ledYellow, GPIO.OUT)
    GPIO.setup(ledRed, GPIO.OUT)
    while True:
        input_state = GPIO.input(button)
        if input_state == False:
            print('Button Pressed')
            lightTraffic(ledGreen, ledYellow, ledRed, 1)
        else:
            GPIO.output(ledGreen, 0)
            GPIO.output(ledYellow, 0)
            GPIO.output(ledRed, 0)
except
```

```
KeyboardInterrupt:    print "You've
exited the program"
finally:
GPIO.cleanup()
```