

**Assignment -3**  
Python Programming

Assignment Date	02 October 2022
Student Name	Viswabharathi S
Student Roll Number	811519106182
Maximum Marks	2 Marks

**Question-1:**

Write a python code for led blinking in raspberry pi

**SOLUTION:**

import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library from time

import sleep # Import the sleep function from the time module

GPIO.setwarnings(False) # Ignore warning for now

GPIO.setmode(GPIO.BOARD) # Use physical pin numbering

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off)

while True: # Run forever

GPIO.output(8, GPIO.HIGH) # Turn on

sleep(1) # Sleep for 1 second GPIO.output(8,

GPIO.LOW) # Turn off sleep(1) # Sleep for 1

second

```
File Edit Format Run Options Window Help
import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library
from time import sleep # Import the sleep function from the time module

GPIO.setwarnings(False) # Ignore warning for now
GPIO.setmode(GPIO.BOARD) # Use physical pin numbering
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off)

while True: # Run forever
    GPIO.output(8, GPIO.HIGH) # Turn on
    sleep(1) # Sleep for 1 second
    GPIO.output(8, GPIO.LOW) # Turn off
    sleep(1) # Sleep for 1 second
```

## Question-2:

Write a python code for traffic light in raspberry pi

SOLUTION:     from gpiozero import Button,

TrafficLights, Buzzer

from time import sleep

buzzer = Buzzer(12)

button = Button(22)   lights

= TrafficLights(24, 13, 9)

while True:

    button.wait\_for\_press()

    buzzer.on()

light.green.on()       sleep(1)

lights.amber.on()

    sleep(1)

lights.red.on()

sleep(1)       lights.off()

buzzer.off()

```
File Edit Format Run Options Window Help
from gpiozero import Button, TrafficLights, Buzzer
from time import sleep

buzzer = Buzzer(15)
button = Button(21)
lights = TrafficLights(25, 8, 7)

while True:
    button.wait_for_press()
    buzzer.on()
    light.green.on()
    sleep(1)
    lights.amber.on()
    sleep(1)
    lights.red.on()
    sleep(1)
    lights.off()
    buzzer.off()
```