

### ASSINGMENT 3

### PYTHON PROGRAMMING

Assignment Date	1 October 2022
Student Name	PRAVEEN BHARATHI K
Student Roll Number	CITC2004207
Maximum Marks	2 Marks

#### Question-1:

Write a python code blinking a LED for Raspberry pi

#### Solution:

##### Code:

```
import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library
from time import sleep # Import the sleep function from the time
moduleGPIO.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 andset initial value to low (off)
while True: # Run forever
    GPIO.output(8, GPIO.HIGH) #
    Turn onsleep(1) # Sleep for 1
    second GPIO.output(8,
    GPIO.LOW) # Turn offsleep(1) #
    Sleep for 1 second
```

**Question-2:**

Write a python code Traffic lights for Raspberry pi

**Solution:**Code:

```
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_p
    res()
    buzzer.on()

    light.green.o
    n()
    sleep(1)

    lights.amber.
    on()
    sleep(1)

    lights.red.on(
    )
    sleep(1)

    lights.off()

    buzzer.off()
```