

Assignment – 2

PYTHON PROGRAM

Assignment Date	07 october 2022
Student Name	R.ABARNA
Student Roll Number	E1194001/812419106001
Maximum Marks	2 Marks

Question 1 :

Write a python code for blinking LED in raspberry pi.

PROGRAM :

```
import time

import RPi.GPIO as GPIO    ## Import GPIO library
GPIO.setmode(GPIO.BOARD)  ## Use board pin numbering
GPIO.setup(11, GPIO.OUT)   ## Setup GPIO Pin 11 to OUT

while True:
    GPIO.output(11,True) ## Turn on Led
    time.sleep(1)        ## Wait for one second
    GPIO.output(11,False) ## Turn off Led
    time.sleep(1)        ## Wait for one second
```

blinking led.py - C:/Users/ELCOT/AppData/Local/Programs/Python/Python37/blinking led.py (3.7.0)

```
File Edit Format Run Options Window Help
import time
import RPi.GPIO as GPIO      ## Import GPIO library
GPIO.setmode(GPIO.BOARD)    ## Use board pin numbering
GPIO.setup(11, GPIO.OUT)    ## Setup GPIO Pin 11 to OUT

while True:
    GPIO.output(11,True)    ## Turn on Led
    time.sleep(1)          ## Wait for one second
    GPIO.output(11,False)  ## Turn off Led
    time.sleep(1)          ## Wait for one second
```

Question 2 :

Write a python code for traffic light in raspberry pi .

PROGRAM

```
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)

light . amber . on()

sleep(1)

light . red . on()

sleep(1)

light . off()

buzzer . off

```
Untitled
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)
    light . amber . on()
    sleep(1)
    light . red . on()
    sleep(1)
    light . off()
    buzzer . off
```