

Assignment – 3

PYTHON PROGRAM

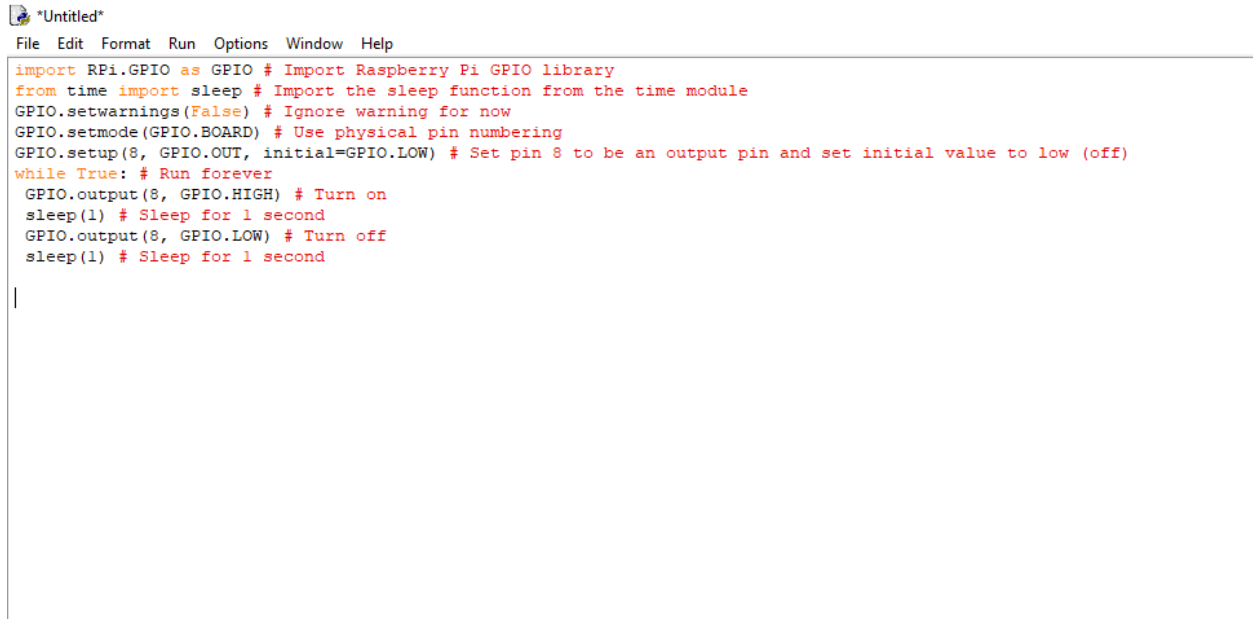
Assignment Date	07 october 2022
Student Name	N.DEVIANJU
Student Roll Number	E1194014/812419106015
Maximum Marks	2 Marks

Question 1 :

Write a python code for blinking LED in raspberry pi.

PROGRAM :

```
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
```



```
import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library
from time import sleep # Import the sleep function from the time module
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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 .

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



```
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()
    lights.green.on()
    sleep(1)
    lights.amber.on()
    sleep(1)
    lights.red.on()
    sleep(1)
    lights.off()
    buzzer.off
```