

**Assignment -3**  
Python  
Programming

Assignment Date	06 October 2022
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Maximum Marks	2 Marks

**Question-1:**

Write a python code for led blinking in

raspberrypi **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(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()
```

```
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()
```