

Assignment -1
Python Programming

Assignment Date	02 October2022
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Maximum Marks	2 Marks

Question-1: Write a python code for LED blinking and traffic with raspberry pi

Code:

```
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BOARD)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(13, GPIO.OUT)
GPIO.setup(15, GPIO.OUT)

while True:
    GPIO.output(10,True) ## Turn on redLed
    time.sleep(1)      ## Wait for one second
    GPIO.output(10,False) ## Turn off redLed
    time.sleep(1)      ## Wait for one second
    GPIO.output(13,True) ## Turn on yellowLed
    time.sleep(1)      ## Wait for one second
    GPIO.output(13,False) ## Turn off yellowLed
    time.sleep(1)      ## Wait for one second
    GPIO.output(15,True) ## Turn on greenLed
    time.sleep(1)      ## Wait for one second
    GPIO.output(15,False) ## Turn off greenLed
    time.sleep(1)      ## Wait for one second
```

```
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()
```