

**Assignment -3**  
Python  
Programming

Assignment Date	05 October 2022
Student Name	Ms.U.Gayathri
Student Roll Number	713319IT010
Maximum Marks	2 Marks

**Question-1:**

Write python code for blinking LED for Raspberry pi.

**Soluti**

**on:**

```
import RPi.GPIO as
GPIO from time
import sleep
GPIO.setmode(GPIO.
BOARD)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True:
GPIO.output(8, GPIO.HIGH)
sleep(1)
GPIO.output(8, GPIO.LOW)
sleep(1)
```

**Question-2:**

Write python code for Traffic lights for Raspberry pi.

**Solution:**

```
import RPi.GPIO
as GPIOimport
time
import signal
import sys
```

```
GPIO.setmode(GPIO  
O.BCM)  
GPIO.setup(9,  
GPIO.OUT)  
GPIO.setup(10,  
GPIO.OUT)  
GPIO.setup(11,  
GPIO.OUT)
```

```
def allLightsOff(signal,  
frame):  
    GPIO.output(9, False)  
    GPIO.output(10,  
False)  
    GPIO.output(11,  
False)  
    GPIO.cleanup()
```

```
sys.exit(0)
signal.signal(signal.SIGINT,
allLightsOff)
```

```
while True:
```

```
    # Red
```

```
    GPIO.output(9,
    True)
```

```
    time.sleep(3)
```

```
    # Red and amber
```

```
    GPIO.output(10,
    True)
```

```
    time.sleep(1)
```

```
    # Green
```

```
    GPIO.output(9,
    False)
```

```
    GPIO.output(10,
    False)
```

```
    GPIO.output(11,
    True)
```

```
    time.sleep(5)
```

```
    # Amber
```

```
    GPIO.output(11,
    False)
```

```
    GPIO.output(10,
    True)
```

```
    time.sleep(2)
```

```
    # Amber off (red comes on at top
of loop)GPIO.output(10, False)
```