

**Assignment -3**  
Python Programming

Assignment Date	7 October 2022
Student Name	s.vikram
Student Roll Number	920819106068
Maximum Marks	2 Marks

**Question-1:**

Write a python code for led blinking in raspberry pi

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
```

Question 2

**Solution:**

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()
```

**Solution:**