

Assignment -3
Python Programming

Assignment Date	02 October 2022
Student Name	Mr. Tamararasan M
Student Roll Number	GCTC1914L14
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:

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()
```