

Assignment -3
Python Programming

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| Assignment Date | 02 October 2022 |
| Student Name | Vignesh J |
| Student Roll Number | 7117191054 |
| 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

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()
```