

Assignment -3
Python Programming

Assignment Date	31 October 2022
Student Name	Shanjay V
Student Roll Number	714019106101
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()
```