

Assignment -3
Python Programming

Assignment Date	02 October 2022
Student Name	SUGAPRIYA M
Student Roll Number	92172019104153
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_p

ress()buzzer.on()

light.green.on()

sleep(1)

lights.amber.on()

sleep(1)

lights.re

d.on()

sleep(1)

lights.off

()

buzzer.o

ff()