

Assignment -3
Python Programming

Assignment Date	02 October 2022
Student Name	Siddharthan A
Student Roll Number	91761914037
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
```

```
File Edit Format Run Options Window Help
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 LED
from time import sleep
```

```
red = LED(22)
amber = LED(27)
green = LED(17)
```

```
while True:
    red.on()
    sleep(1)
    amber.on()
    sleep(1)
    green.on()
    sleep(1)
    red.off()
    sleep(1)
    amber.off()
    sleep(1)
    green.off()
```

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```
from gpiozero import LED
from time import sleep
```

```
red = LED(22)
amber = LED(27)
green = LED(17)
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while True:
    red.on()
    sleep(1)
    amber.on()
    sleep(1)
    green.on()
    sleep(1)
    red.off()
    sleep(1)
    amber.off()
    sleep(1)
    green.off()
    |
```