

Assignment -3
Python Programming

Assignment Date	30 September 2022
Student Name	Narmadha .M
Student Roll Number	211419106178
Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED

```
import time

import RPi.GPIO as GPIO

GPIO.setmode(GPIO.BOARD)

GPIO.setup(11, GPIO.OUT)

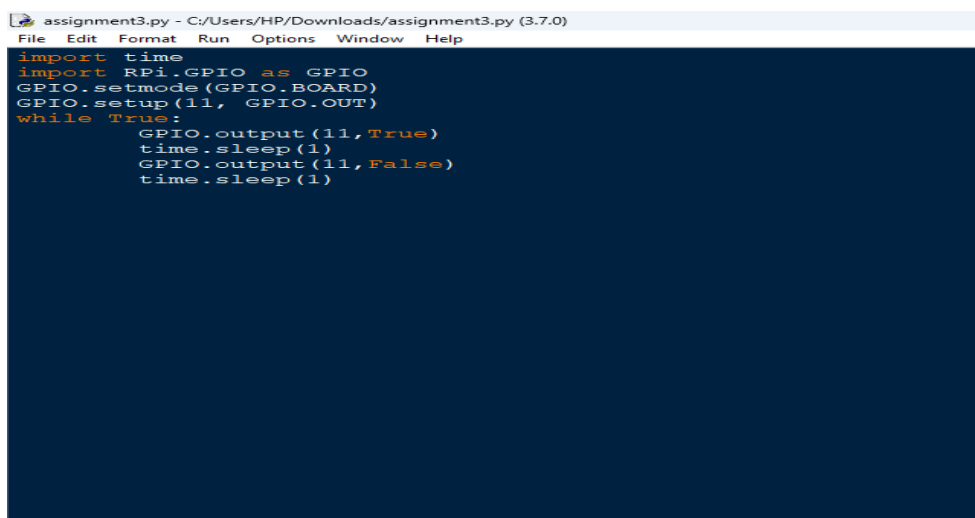
while True:

    GPIO.output(11,True)

    time.sleep(1)

    GPIO.output(11,False)

    time.sleep(1)
```

A screenshot of a Python IDE window titled "assignment3.py - C:/Users/HP/Downloads/assignment3.py (3.7.0)". The window has a menu bar with "File", "Edit", "Format", "Run", "Options", "Window", and "Help". The code is displayed on a dark blue background with syntax highlighting. The code is identical to the one shown in the previous block, implementing a loop that toggles an LED on pin 11 every second.

```
assignment3.py - C:/Users/HP/Downloads/assignment3.py (3.7.0)
File Edit Format Run Options Window Help
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BOARD)
GPIO.setup(11, GPIO.OUT)
while True:
    GPIO.output(11,True)
    time.sleep(1)
    GPIO.output(11,False)
    time.sleep(1)
```

Question-2:

Write python code for Traffic lights

```
import time
import RPi.GPIO as GPIO
GPIO.cleanup()

GPIO.setmode(GPIO.BOARD)
GPIO.setup(11,GPIO.OUT)
GPIO.setup(13,GPIO.OUT)
GPIO.setup(15,GPIO.OUT)
GPIO.setup(12,GPIO.IN)
while True:
    GPIO.output(11,GPIO.HIGH)
    if (GPIO.input(12) == True):
        print("pressed")
        time.sleep(3)
        GPIO.output(13,GPIO.HIGH)
        time.sleep(3)
        GPIO.output(11,GPIO.LOW)
        GPIO.output(11,GPIO.LOW)
        GPIO.output(13,GPIO.LOW)
        GPIO.output(15,GPIO.HIGH)
        time.sleep(3)
        GPIO.output(15,GPIO.LOW)
        GPIO.output(13,GPIO.HIGH)
        time.sleep(3)
        GPIO.output(13,GPIO.LOW)
    print("End")
```

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```
import time
import RPi.GPIO as GPIO
GPIO.cleanup()
GPIO.setmode(GPIO.BOARD)
GPIO.setup(11,GPIO.OUT)
GPIO.setup(13,GPIO.OUT)
GPIO.setup(15,GPIO.OUT)
GPIO.setup(12,GPIO.IN)
while True:
    GPIO.output(11,GPIO.HIGH)
    if (GPIO.input(12) == True):
        print("pressed")
    time.sleep(3)
    GPIO.output(13,GPIO.HIGH)
    time.sleep(3)
    GPIO.output(11,GPIO.LOW)
    GPIO.output(11,GPIO.LOW)
    GPIO.output(13,GPIO.LOW)
    GPIO.output(15,GPIO.HIGH)
    time.sleep(3)
    GPIO.output(15,GPIO.LOW)
    GPIO.output(13,GPIO.HIGH)
    time.sleep(3)
    GPIO.output(13,GPIO.LOW)
    print("End")
```