

ASSIGNMENT 3

PYTHON PROGRAMMING

Team ID	PNT2022TMID49939
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Student Name	Vijaya Kumar. S
Student Roll Number	950619106305

Question1:

Write a python code for blinking LED using Raspberry pi.

Program Code:

```
Import RPi.GPIO as GPIO  
GPIO.setmode(GPIO.BOARD)  
GPIO.setup(3,GPIO.OUTPUT  
GPIO.output(3, True)
```

Output:

The screenshot displays a web-based development environment. On the left, a code editor shows a Python script named `blinking led.py` with the following code:

```
1 import RPi.GPIO as GPIO
2 GPIO.setmode(GPIO.BOARD)
3 GPIO.setup(3, GPIO.OUT)
4 GPIO.output(3, True)
5
```

On the right, a terminal window titled `mycode.py` is open. It features a Raspberry Pi logo and the text `RPi GPIO connectors:` above a diagram of the GPIO pin headers. Below the diagram is a REPL prompt `>_REPL`. A green play button is visible to the right of the terminal.

The diagram shows the GPIO pin headers with the following labels:

Pin	Label
2	5V Power
4	5V Power
6	Ground
8	BCM 14
10	5V Power
12	BCM 16
14	Ground
16	BCM 18
18	5V Power
20	Ground
22	BCM 22
24	5V Power
26	BCM 26
28	5V Power
30	Ground
32	BCM 32
34	Ground
36	BCM 36
38	5V Power
40	Ground
1	5V Power
3	BCM 2
5	BCM 4
7	Ground
9	BCM 10
11	BCM 12
13	BCM 14
15	BCM 16
17	5V Power
19	BCM 18
21	Ground
23	BCM 20
25	BCM 22
27	BCM 24
29	BCM 26
31	BCM 28
33	BCM 30
35	BCM 32
37	BCM 34
39	Ground

Question2:

Write a python code for Traffic Lights using Raspberrry pi.

Program Code:

```
from gpiozero import LED
```

```
from time import sleep
```

```
green=LED(8)
```

```
blue=LED(13)
```

```
red=LED(12)
```

```
while True:
```

```
    green.off()
```

```
    red.off()
```

```
    blue.off()
```

```
    sleep(1)
```

```
    green.on()
```

```
    sleep(1)
```

```
    red.off()
```

```
    blue.on()
```

```
    sleep(1)
```

Output:

