

ASSIGNMENT 3

PYTHON PROGRAMMING

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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 IDE interface. 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 window titled `mycode.py` displays a diagram of the Raspberry Pi GPIO connectors. The diagram is titled "RPi GPIO connectors:" and shows a grid of 40 pins. The pins are color-coded: red for power (1, 2, 4, 5, 17, 19, 24, 26, 30, 32, 34, 36, 38, 40), green for ground (3, 7, 9, 11, 13, 15, 16, 20, 22, 23, 25, 27, 29, 31, 33, 35, 37, 39), and blue for BCM pins (12, 14, 18, 21, 28, 32, 36, 40). The diagram also includes a small Raspberry Pi logo and a terminal window with the prompt `>_REPL`.

At the bottom of the IDE, there is a taskbar with several tabs: "Create with code.html", "Create with code.html", "Create with code.html Canceled", "blinking code.html", and "blinking code.html".

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:

