

IBM - NALAYA THIRAN PROJECT

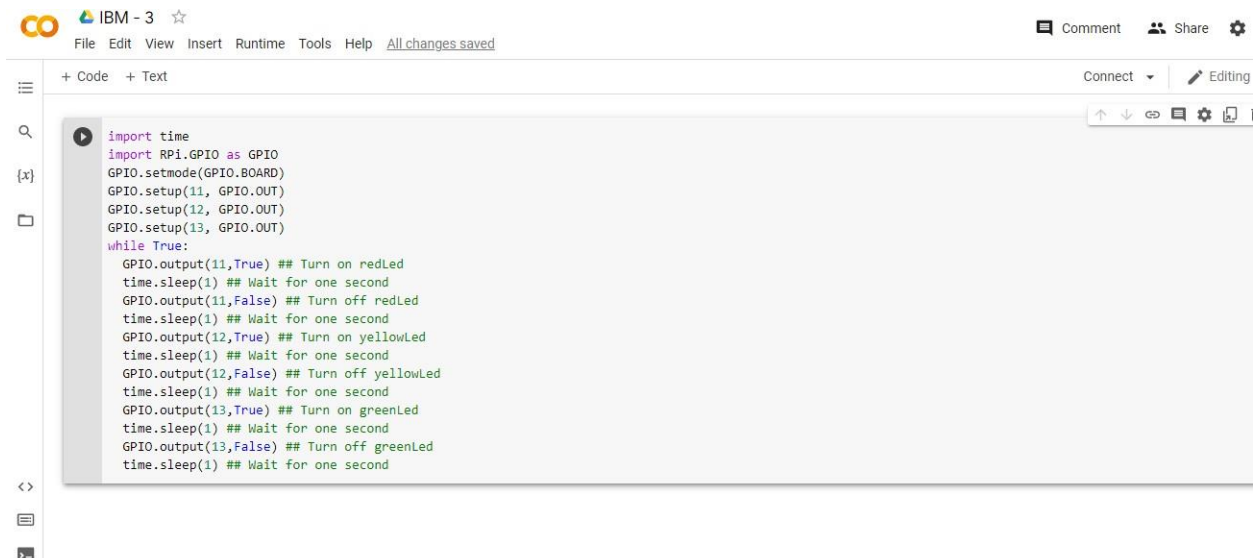
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PROJECT	Signs with Smart Connectivity for Better Road Safety
ASSIGNMENT NO	3

QUESTION: Write Python code for Blinking LED and Traffic Lights for Raspberry Pi. Only the Python code is enough and need not to execute it in the board.

PROGRAM:

```
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BOARD)
GPIO.setup(11, GPIO.OUT)
GPIO.setup(12, GPIO.OUT)
GPIO.setup(13, GPIO.OUT)
while True:
    GPIO.output(11,True) ## Turn on redLed time.sleep(1) ## Wait for one second
    GPIO.output(11,False) ## Turn off redLed time.sleep(1) ## Wait for one second
    GPIO.output(12,True) ## Turn on yellowLed time.sleep(1) ## Wait for one second
    GPIO.output(12,False) ## Turn off yellowLedtime.sleep(1) ## Wait for one second
    GPIO.output(13,True) ## Turn on greenLed time.sleep(1) ## Wait for one second
    GPIO.output(13,False) ## Turn off greenLed
    time.sleep(1) ## Wait for one second
```

OUTPUT:

A screenshot of a code editor interface. At the top, there's a header bar with the IBM logo, the text 'IBM - 3', and a star icon. Below this is a menu bar with 'File', 'Edit', 'View', 'Insert', 'Runtime', 'Tools', 'Help', and a link 'All changes saved'. On the right side of the header bar are icons for 'Comment', 'Share', and 'Settings'. The main area of the editor shows a Python script. The script starts with 'import time' and 'import RPi.GPIO as GPIO'. It then sets the GPIO mode to 'BOARD' and configures pins 11, 12, and 13 as outputs. A 'while True:' loop follows, where each iteration turns on a pin (11, then 12, then 13) for one second, turns it off for one second, and then moves to the next pin. The code is color-coded: keywords are blue, comments are green, and function calls/variables are black. On the left side of the editor, there's a sidebar with icons for file explorer, search, and other IDE features. On the right side, there's a toolbar with icons for running, saving, and other actions.

