

ASSIGNMENT 3

NAME: Harini gayathri S

ROLL NUMBER: 718019L215

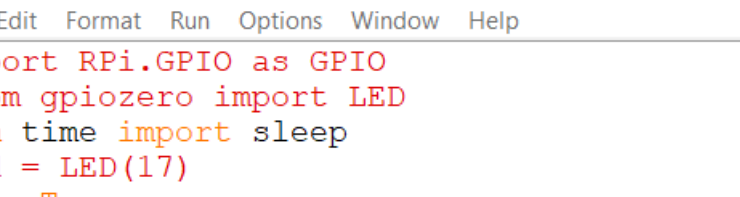
TOPIC: BLINKING LED AND TRAFFIC LIGHTS USING PYTHON CODE

Editor window:

Traffic light:

```
import RPi.GPIO as GPIO
import time
import signal
import sys
#setup
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
#Turn off all lights
def allLightOff(signal, frame):
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, False)
    GPIO.cleanup()
    sys.exit(0)
signal.signal(signal.SIGINT, allLightsOff)
#Forever Loop
while True:
    #Red
    GPIO.output(9, True)
    time.sleep(3)
    GPIO.output(10, True)
    time.sleep(1)
    #Green
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, True)
    time.sleep(5)
    #Amber
    GPIO.output(11, False)
    GPIO.output(10, True)
    time.sleep(2)
    #Amber off
    GPIO.output(10, False)
```

Editor window:



The screenshot shows a Python IDE window titled "led_blink.py - D:\ibm_proj\assignment\py\led_blink.py (3.9.6)". The menu bar includes File, Edit, Format, Run, Options, Window, and Help. The code in the editor is as follows:

```
#import RPi.GPIO as GPIO
#from gpiozero import LED
from time import sleep
#led = LED(17)
while True:
    #led.on()
    print("LED turned ON")
    sleep(1)
    #led.off()
    print("LED turned OFF")
    sleep(1)
```

Output:

[illegible]

