ASSIGNMENT – 3

Python programming

Assignment Date	
Student name	R. Stella
Student roll number	212019106019
Maximum marks	2 marks

QUES: write python code for blinking LED and traffic lights for Raspberry pi.

CODE: for LED

```
import WiringPi2 as wiringpi
import time

# initialize
wiringpi.wiringPiSetup()

# define GPIO mode
GP1018 = 1
GP1023 = 4
GP1024 = 5
LOW = 0
HIGH = 1
OUTPUT = 1
wiringpi.pinMode(GP1018, OUTPUT)
wiringpi.pinMode(GP1023, OUTPUT)
wiringpi.pinMode(GP1024, OUTPUT)


# make all LEDs off
def clear_all():
   wiringpi.digitalWrite(GP1018, LOW)
   wiringpi.digitalWrite(GP1023, LOW)
   wiringpi.digitalWrite(GP1024, LOW)

# turn on LED sequentially
try:
   while 1:
```

```
        clear_all()
        print("turn on LED 1")
        wiringpi.digitalWrite(GPIO18, HIGH)
        time.sleep(2)
        clear_all()
        print("turn on LED 2")
        wiringpi.digitalWrite(GPIO23, HIGH)
        time.sleep(2)
        clear_all()
        print("turn on LED 3")
        wiringpi.digitalWrite(GPIO24, HIGH)
        time.sleep(2)

except KeyboardInterrupt:
    clear_all()

print("done")
```

CODE: traffic light

```
from gpiozero import LED
from time import sleep

red=LED(22)
amber=LED(27)
green=LED(17)

while True:
 red.on()
 sleep(1)
 amber.on()
 sleep(1)
 green.on()
 sleep(1)
 red.off()
 sleep(1)
 amber.off()
 sleep(1)
 green.off()
```