ASSIGNMENT -3
PYTHON CODE FOR BLINKING
LED & TRAFFIC LIGHTS

ASSIGNMENT DATE	7 OCTOBER 2022
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MAXIMUM MARKS	

QUESTION-1:

WRITE PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHTS FOR RASPBERRY PI.

SOLUTION

```
#BLINKING LED
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.setup(18, GPIO.OUT)
while True:
        GPIO.output(18,True) #
        Turn on Ledtime.sleep(1)
        GPIO.output(18,False) #
        Turn off Led
        time.sleep(1)
#TRAFFIC LIGHTS
import RPi.GPIO
as GPIOimport
time
import
signal
import
sys
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
def allLightsOff(signal, frame):GPIO.output(9, False) GPIO.output(10, False) GPIO.output(11, False) GPIO.cleanup()
sys.exit(0)
signal.signal(signal.SIGINT, allLightsOff)while True:
    # Red
```

```
GPIO.output(9, True)
time.sleep(3)
# Red and amber
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 (red comes on at top of loop)
GPIO.output(10, False)
```