ASSIGMNENT-III

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| Domain | IOT |
| Project Title | Industry Specific Intelligent Fire Management System |
| Student Roll Number | PNT2022TMID51070 |

**QUESTION:**

Write python code for blinking LED and traffic light for Raspberry pi.

# PYTHON CODE FOR BLINKING LED:

import RPI.GPIO as GPIO from time import sleep

GPIO.setwarnings(False) GPIO.setmode(GPIO.BOARD)

GPIO.setup(7, GPIO.OUT, initial=GPIO.LOW)

while True:

GPIO.output(7, GPIO.HIGH)

print("LED on") sleep(1)

GPIO.output(7, GPIO.LOW)

print("LED off") sleep(1)

# PYTHON CODE FOR TRAFFIC LIGHT:

import RPI.GPIO as GPIO import 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)

# 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)GPIO.output(10, False) GPIO.output(11, False)

GPIO.cleanup() sys.exit(0)