**IOT ASSIGNMENT 3**

**TOPIC:** Write Python code for blinking LED and Traffic lights for Raspberry pi.

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# **GitHub ID**: https://github.com/IBM-EPBL/IBM-Project-23757-1659928256

# Code to make LED blink:

import RPi.GPIO as GPIO import time

LED\_PIN = 17

GPIO.setmode(GPIO.BCM) GPIO.setup(LED\_PIN, GPIO.OUT)

while True:

GPIO.output(LED\_PIN, GPIO.HIGH)

time.sleep(1)

GPIO.output(LED\_PIN, GPIO.LOW)

time.sleep(1) GPIO.cleanup()

Code to blink Traffic lights for Raspberry pi:

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 when user ends demo 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)

# Loop forever 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)