IBM ASSIGNMENT-3

Python Programming

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| Assignment Date | 06 October 2022 |
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Write python code for blinking LED and Traffic lights for Raspberry Pi. CODE FOR BLINKING LED:

import RPi.GPIO as GPIO

import time

GPIO.setmode(GPIO.BCM)

ent = 0

MAIL\_CHECK\_FREQ = 1 # change LED status every 1 seconds RED.LED = 4

GPIO.setup(RED\_LED, GPIO.OUT)

while True:

ifent == 0:

GPIO.output(RED\_LED, False)

ent = 1 else:

GPIO.output(RED\_LED. True)

ent = 0 time.sleep(MAIL\_CHECK\_FREQ)

GPIO.cleanup()

CODE FOR TRAFFIC LIGHTS:

from gpiozero import Button, TrafficLights, Buzzer from time import sleep

buzzer = Buzzer(15)

button = Button(21)

lights = TrafficLights(25,8,7)

while True:

button. wait\_for\_press()

buzzer.on()

light.green.on()

sleep(1)

lights.amber.on()

sleep(l)

lights.red.on() from gpiozero import Button, TrafficLights, Buzzer from time import sleep

buzzer = Buzzer(15)

button = Button(21)

lights = TrafficLights(25, 8, *7)*

while True:

button.wait\_for\_press()

buzzer.onf)

light.green.on()

sleep(1)

lights.amber.on()

sleep(1)

lights.red.onf)

sleep(1)

lights.offO

buzzer.offQ