IBM ASSIGNMENT — 3

Python Programming

| 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.seimode(GPIO.BCM) cnt = 0

MAIL CHECK FREQ = 1 # change LED staius every 1 seconds

RED LED = 4

GPIO.setup(RED LED, GPIO.OUT)

# while True:

ifcnt == 0 :

GPIO.output(RED LED, False) cnt =

else:

# GPIO.output(RED LED, True) cnt 0

time.sleep(MAIL CHECK FREQ} GPIO.cleanup()

CODE FOR TRAFFIC LIGHTS:

from gp iozero import Button, TrafficLig hts, Buzzer from time import s leep

buzzer = Buzzer(15) button = B utton(21)

ligits = TrafficLig its(25, 8, 7}

while True.

button. wait for press()

buzzer.on() light. green.on() sIeep(1 }

lights.amber. on()

sIeep(1 }

lights. red.on()

from gp iozero import Button, TrafficLig hts, Buzzer from time import s leep

buzzer = Buzzer(15) button = Button(21)

lights = TrafficLights(25, 8, 7)

while True.

button.wait for press()

buzzer.on () light. green.on() sIeep(1 }

lights.amber. on() sIeep(1 }

lights. red.on()

sIeep(1 } lights.off() buzzer.off()