**ASSIGNMENT -3**

**Python Programming for Raspberry pi**

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| Assignment Date | 13 October 2022 |
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| Maximum Marks | 2 Marks |

**Question-1:**

Write python code for blinking LED and Traffic lights for Raspberry pi. Only python code is enough, no need to execute in raspberry pi.

# SOLUTION :

**PYTHON CODE FOR BLINKING LED FOR RASPBERRY PI**

import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library

from time import sleep # Import the sleep function from the time module

GPIO.setwarnings(False) # Ignore warning for now

GPIO.setmode(GPIO.BOARD) # Use physical pin numbering

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off)

while True: # Run forever

GPIO.output(8, GPIO.HIGH) # Turn on

sleep(1) # Sleep for 1 second

GPIO.output(8, GPIO.LOW) # Turn off

sleep(1) # Sleep for 1 second

**PYTHON CODE FOR TRAFFIC LIGHT SYSTEM USING RASPBERRY PI**

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(1)

lights.red.on()

sleep(1)

lights.off()