**ASSIGNMENT-3**

|  |  |
| --- | --- |
| Date | 14-10-2022 |
| Team ID | PNT2022TMID45219 |
| Project Name | Industry-specific intelligent fire management system |
| Maximum Marks | 2 Marks |

**NAME:**  VIKRAM T

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

**CODE:**

1. **PYTHON CODE FOR BLINKING LED**

importRPi.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

1. **PYTHON CODE FOR TRAFFIC LIGHT**

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

Sleep (1) # Sleep for 1 second 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 defallLightsOff(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)