# Assignment -3

|  |  |
| --- | --- |
| Assignment Date | 5 October 2022 |
| Student Name | NIVETHITHA P |
| Student Roll Number | 111519104093 |
| Maximum Marks | 2 Marks |

# Question-1:

Write a python code for blinking LED and Traffic lights for Raspberry pi.

**Solution :**

#LED BLINKING :

import RPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True: #infinite loop

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

print("The LED is ON")

sleep(5) # Sleep for 5 second

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

print("The LED is OFF")

sleep(5) # Sleep for 5 second

#TRAFFIC LIGHT CODE :

from gpiozero import LED

from time import sleep

red= LED(17) #pin numbers connected to Led's

amber=(22)

green=(27)

while True:

red.on() #RED light

print("Red light is ON")

for i in range(60,0,-1):

print("Remaining time: ",i)

sleep(1)

red.off()

amber.on() # AMBER light

print("Yellow light is ON")

for i in range(5,0,-1):

print("Remaining time: ",i)

sleep(1)

amber.off()

green.on #GREEN light

print("Green light is ON")

for i in range(40,0,-1):

print("Remaining time: ",i)

sleep(1)

green.off()