**Assignment -3**

Python Programming

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| **Assignment Date** | **05 October 2022** |
| **Student Name** | **ABINAYA P** |
| **Student Roll Number** | **811019106004** |
| **Maximum Marks** | **2 Marks** |

**Question-1 :**

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

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| **Solution :** |

**LED BLINKING CODE**

import RPi.GPIO as GP from time import sleep

GP.setwarnings(False)

GP.setmode(GP.BOARD)

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

while True: #infinite loop

GP.output(8, GPIO.HIGH) # Turn on print("The LED is ON")

sleep(2) # Sleep for 2 second

GP.output(8, GPIO.LOW) # Turn off print("The LED is OFF")

sleep(2) # Sleep for 2 second

**TRAFFIC LIGHT RASBERRY PYTHON CODE**

From gpiozero import LED

From time import sleep

Red= LED(17) #pin numbers connected to Led’s

Aster=(22)

Green=(27)

While True:

Red.on() #RED light

Print(“Red light is ON”)

For I in range(100,0,-1):

Print(“Remaining time: “,i)

Sleep(1)

Red.off()

Aster.on() # ASTER light

Print(“Yellow light is ON”)

For I in range(5,0,-1):

Print(“Remaining time: “,i)

Sleep(1)

Aster.off()

Green.on #GREEN light

Print(“Green light is ON”)

For I in range(30,0,-1):

Print(“Remaining time: “,i)

Sleep(1)

Green.off()