**Assignment -3**

Blinking LED and Traffic Light

|  |  |
| --- | --- |
| Assignment Date | 28 September 2022 |
| Student Name | Mr. Sudarshan A R |
| Student Roll Number | 2019504594 |
| Maximum Marks | 2 Marks |

**Question-1:**

Write python code for blinking LED for raspberry pi.

## Solution:

**import RPi.GPIO as GPIO**

**import time**

**GPIO.setmode(GPIO.BCM)**

**GPIO.setwarnings(False)**

**GPIO.setup(14,GPIO.OUT)**

**# While loop**

**while True:**

**# set GPIO14 pin to HIGH**

**GPIO.output(14,GPIO.HIGH)**

**# show message to Terminal**

**print ("LED is now ON")**

**# pause for two seconds**

**time.sleep(2)**

**# set GPIO14 pin to HIGH**

**GPIO.output(14,GPIO.LOW)**

**# show message to Terminal**

**print ("LED is now OFF")**

**# pause for two seconds**

**time.sleep(2)**

**Question-2:**

Write python code for traffic lights for raspberry pi.

## Solution:

**import time**

**import RPi.GPIO as GPIO**

**GPIO.cleanup()**

**GPIO.setmode(GPIO.BOARD)**

**GPIO.setup(3,GPIO.OUT)**

**GPIO.setup(5,GPIO.OUT)**

**GPIO.setup(7,GPIO.OUT)**

**while True:**

**# Turn on the red LED**

**GPIO.output(3,GPIO.HIGH)**

**time.sleep(2)**

**# Turn on the yellow LED**

**GPIO.output(5,GPIO.HIGH)**

**time.sleep(2)**

**# Turn off the yellow LED**

**GPIO.output(5,GPIO.LOW)**

**# Turn off the red LED**

**GPIO.output(3,GPIO.LOW)**

**# Turn on the green LED**

**GPIO.output(7,GPIO.HIGH)**

**time.sleep(2)**

**# Turn off the green LED**

**GPIO.output(7,GPIO.LOW)**

**# Turn on the yellow LED**

**GPIO.output(5,GPIO.HIGH)**

**time.sleep(2)**