**Assignment -3**

Python Programming

|  |  |
| --- | --- |
| Assignment Date | 06 October 2022 |
| Student Name | Dharan.R |
| Student Roll Number | 191041017 |

**Question-1:**

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

|  |
| --- |
| **Solution:** |
| **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**  **def allLightsOff(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)** |
|  |