**Assignment -3**

Python Programming

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| Assignment Date | 05 October 2022 |
| Student Name | Mr. P. Athulraj |
| Student Roll Number | 113119UG03011 |
| Maximum Marks | 2 Marks |

**Question-1:**

Write python code for blinking LED for Raspberry pi.

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| **Solution:** |
|  | **import RPi.GPIO as GPIO** |
|  | **from** time **import** sleep |
|  | GPIO.setmode(GPIO.BOARD) |
|  | GPIO.setup(**8**, GPIO.OUT, initial=GPIO.LOW) |
|  |  |
|  | **while True:** |
|  | GPIO.output(**8**, GPIO.HIGH) |
|  | sleep(**1**) |
|  | GPIO.output(**8**, GPIO.LOW) |
|  | sleep(**1**) |
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**Question-2:**

Write python code for Traffic lights for Raspberry pi.

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| **Solution:** |

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| **import RPi.GPIO as GPIO**  **import** time  **import** signal  **import** sys  GPIO.setmode(GPIO.BCM)  GPIO.setup(**9**, GPIO.OUT)  GPIO.setup(**10**, GPIO.OUT)  GPIO.setup(**11**, GPIO.OUT)  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)  **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) |