## **Assignments**

**INSTRUCTIONS**: Create and submit your files with your matric number.

Eg. KIE160001A1.doc, KIE160001A2.py

## **Assignment 1**

Q1. Comparing with C programming language, what are the advantages and disadvantages of Python.

[2 Marks]

Q2. Despite being relatively slow (for eg: as compared to C), Python is gaining popularity, especially in the scientific community, and as a matter of fact, many well-known universities include Python as part of their syllabus. Explain why is this so?

[3 Marks]

Q3. One of the attractions of Python, is having many useful and easy to use libraries or modules (eg: NumPy, SciPy, etc). Pick up 5 popular modules, describe briefly the modules, how they are used (eg: give example codes) and if there is connection/relation between the modules, state it.

[5 Marks]

## **Assignment 2**

Using PyQt5 module (and Python 3), write a simple game (for eg: Minesweeper) which has Graphical User Interface (GUI) for the interaction between user and the game program. Even-though a simple game is sufficient, if a game is developed having below attributes, your effort will not go unnoticed and be most certainly rewarded.

- Sleek & pretty user interface
- Additional functional user interface (eg: Score board, etc)
- Originality (eg: A complete new game not yet in the market)
- Complexity (eg: A Chess game)

[10 Marks]

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