CLASS WORK 2

Notes and Instructions:

This is group work
Indicate the members of the group (Name and admission number)
Attempt all question
All programmes should be written in python
Submit by uploading to ODEL by 11/10/2024

Questions

1. Differentiate between a list and a tuple
2. Between a list and a tuple, which type relates more to an array as defined in C, C++ or Java.
3. Explain the following concepts as used in tuples, list and sets
   i.   changeable
   ii.   Indexed
   iii. Mutable
4. A student in a certain college takes 7 units per semester. The record below shows an extract of his transcript. Assume that the blank records represent missing marks.

Unit code	Score
SOC 100	61
SOC 102	59
SOC 104	72
SOC 105	56
SOC 107	
SOC 111	38
SOC 112	

Required:

i.   Write a program that holds the scores in the transcript above in a list. The program should also display the scores on the screen and the number of units.

ii.   Assume that the missing marks for SOC 107 and SOC 112 are 64 and 53 respectively. Use relevant methods to update the transcript

iii. Assume that the student later applies for remark of SOC 111 and has a new score of 46. Use relevant methods to update the score in the transcript.

iv.   Modify the program so that it computes the total marks and the average mark for the student