Course Name: Fundamentals of Programming & Data Science	**Course Code:** CMPE-112L
Assignment Type: Complex Engineering Problem	**Dated:** 12th February 2024
Semester: 2nd	**Session:** 2023
Lab/Project/Assignment #: 1	**CLOs to be covered:** CLO 2
Lab Title: ECAT Exam App	**Teacher Name:** Engr. Afeef Obaid

Complex Engineering Problem (CEP):

No.	Attribute	Details
WP1	Depth of Knowledge required	This problem requires deep knowledge of String, List and Tuple data types in Python.
WP2	Range of conflicting requirements	This problem has wide range of requirements including Number of Questions, Scoring, Result Display, User Interface and Interaction, Error Handling, Efficiency and Scalability. Balancing these conflicting requirements will require careful design and implementation of the Python program to ensure that it meets the needs of both users and administrators of the ECAT Examination
WP3	Depth of Analysis required	This problem required depth of analysis in terms of Question Bank, Randomization, Data Structure, Validation, Result Calculation and Scoring System

CEP Description

Write a Python program for taking ECAT Examination. The program will display at least 10 questions with 4 choices, the user has the option to answer the question or skip it.

If the user attempts all the questions, then the test will be submitted automatically or the user has the option to submit the test after attempting any number of questions.

After submitting the test, the result will be displayed according to given criteria:
Correct Answer: 4 Marks
Wrong Answer: -1 Marks
Skip Question: 0 Marks

Program will also display the number of questions skipped, Correct and wrong answers given by the user.