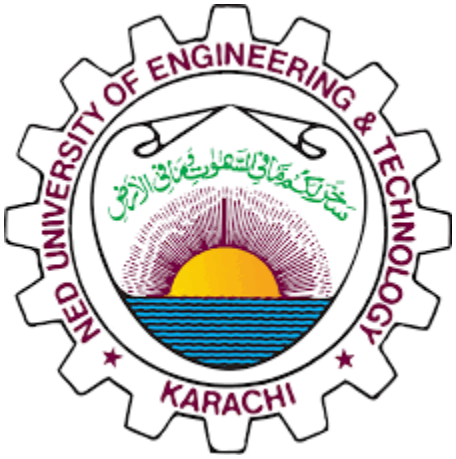

Name : Syed Aali

Section: B

Roll Number : CS-053

Computer Programming Assignment

Submitted To Sir Kashif Asrar

Matrix Calculator :

We were asked to build a calculator through loops that would perform mathematical operations on matrices, that were to be inputted by the user. The operations being Addition, Subtraction and Multiplication between two matrices that had been or were to be inputted by a user.

- **Key Features:**

1. The program has an infinite while loop that makes the program user friendly as it depends on the user what output he gets and when he gets it which makes the program simple and effective as it is on the user to decide when he wants to break the loop as well.

2. Using if and comparative statements, I made the program work in a way that requires a set of inputs to give a specific output for example entering the value "1" gives the user the output of adding the two matrices together, meanwhile anything above "4" or below "0" prints a message telling the user to re enter his choice attentively etc.

3. To make sure the user knows how to exit the program or use the operations a message is printed that defines the operations and their respective inputs.

4. If the user were to enter a 4 the program breaks and a message is printed accordingly.

5. Nested looping and the appending feature of lists have been used to make sure that the matrices fill up in the lists as they should.

6. Nesting and Appending also come in handy when you operate the matrices to get your desired results.

7. Furthermore I was able to define and recall a function to take inputs of the values to be entered in a matrix, using the keywords def and return.

- **References:**

I used the websites to clear up my concepts and I also used some help from my elder brother when I got stuck during the making of the three nested for loop.

1. https://www.geeksforgeeks.org/take-matrix-input-from-user-in-python/
2. https://www.educative.io/edpresso/how-to-multiply-matrices-in-python

Thank you for reading till the end :)