National University of Sciences and Technology (NUST)
School of Electrical Engineering and Computer Science

Department of Computing

CS110: Fundamentals of Computer Programming

Class: BESE – 7B

Assignment 3

Submission Due: Jan 1st, 2017, 11:55 pm

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Assignment 3

Introduction

In this assignment you have to understand and implement the following concepts

- Loops
- Lists
- Functions
- Modules

Objectives

- To develop skills for using loops and modules.
- To understand how to program conditional calculations.

Tools/Software Requirement

- Python Editor

Task 1 [5]

Write a module called XXStringProcessor. XX is replaced by your initials. The module will provide an alternate implementation of the different functions that are available in Python for string processing. You should also add more methods with functionality that is not part of text processing method available in Python. You should NOT use built in string processing methods until and unless there is not alternative.

You will also write a function that uses your module and displays its utility.

The number of methods your implement and their complexity will be graded relative to your class fellows.

Task 2 [5]

Create a console based matrix calculator. It can take matrices of variable sizes as input from the user and provides matrix operations.

General Instructions

Any assumptions that you take must be properly stated.

You must do this work individually but you can ask for help from the Lab Engineer. You cannot share your code with anyone or copy code. Plagiarism will result in zero marks.

Deliverables

Submit only 1 zip file (please do not submit a .rar as it does not decrypt through script) on the given LMS link, which contains all the programs. You must include the source code files. Anyone who submits a word document or anything other than source files will be awarded a zero. Your file should be named as asg3[YOUR FIRST AND LAST NAME].zip

Always submit 1 day before the deadline to avoid any last minute delays.

Marks break down:

1. Working of the program: 60%

2. Code readability: 20%

3. Output structure and aesthetics: 20%