

## Assignment 2

(100 points)

RULES GOVERNING ACADEMIC INTEGRITY ARE STRICTLY OBSERVED  
WITHOUT EXCEPTION.

### Purpose:

To allow you to exercise with a logical thinking process to formulate very simple algorithms, leading the way to the implementation of this logic in some programming language like Python. The logic will possibly include simple inputs and outputs, lists, files, strings, control flow.

### Question:

You are to implement the following functions:

`replaceLine(fileName, lineNumber, newString)` where:

filename is the name of the file to be manipulated.

lineNumber is the lineNumber that will be replaced (0 indexed)

newString is the string that will replace the line at lineNumber.

`deleteLine(fileName, lineNumber):`

deletes the line numbered at lineNumber from fileName (0 indexed).

`swapLines(fileName, lineNumber1, lineNumber2):`

swaps the lines at lineNumber1 and 2 in fileName (0 indexed).

`stripLine(fileName, lineNumber, character)`

removes character from lineNumber in fileName (0 indexed)

`duplicateLine(fileName, lineNumber, n)`

creates n new duplicates of lineNumber (0 indexed) right after this line.

Each function generates an exception if any error happens (look this up). Such as for example providing a negative line number or a line number that does not exist, or a file name that does not exist, etc.

You will be graded as follows:

- 15 points for proper functionality of each function (total 75).
- 10 points for handling exceptions.
- 5 points for documentation.
- 10 points for a professional evaluation of your code.