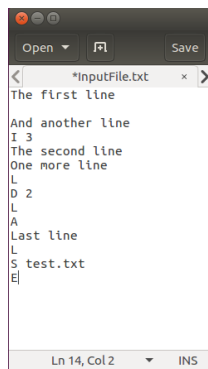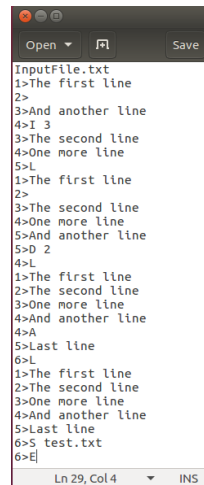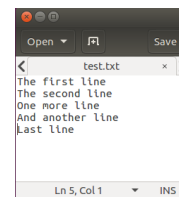# CS371 - Project #2

Due Date: 18.11.2016

Question 1

Write a simple line editor. Keep the entire text on a linked list, one line in a separate node. Start the program with getting input file whose each line is a command, after which a prompt appears along with the line number. If the letter I is entered with a number n following it, then insert the text to be followed before line n. If I is not followed by a number, then insert the text before the current line. If D is entered with two numbers n and m, one n, or no number following it, then delete lines n through m, line n, or the current line. Do the same with the command L, which stands for listing lines. If A is entered, then append the text to the existing lines. Entry E signifies exit and saving the text in a file. If the letter S is entered with a filename, save the editor contents to a file named filename. All inputs are provided with a .txt file named InputFile.txt. All expected outputs have to save a text file named OutputFile.txt.

(a) InputFile.txt

(b) OutputFile.txt

(c) test.txt

Question 2

When sorting parallel arrays, it is useful to have a version of a sorting routine that returns a permutation, say index[ ], of the indices in sorted order. Add a method indirectSort() to Selection that takes an array of Comparable objects a[ ] and a Compator object s as arguments, but instead of rearranging the entries of a[ ] returns an integer array index[ ] so that a[index[0]] through a[index[N-1]] are the items in ascending order.

Details:

Submit your assignment by 23:59 on the due date through LMS.For the first question, your class name has to be TestEditor. In the second question, you need to submit Selection class that you edited. All input and output naming is strict. You have to compress your code with the zip utility and name your file as `StudentId_Name_Surname_Project2.zip`. Assignments must be done individually. We will not tolerate any act that may be interpreted as plagiarism, and in such cases, you will be referred to the university ethical committee. Do not walk in randomly (especially on the last day) into your TA's or the instructor's offices. Make an appointment first. This is important. Your TA's have other responsibilities. Please respect their personal schedules!