

## **Cmpe 493 Introduction to Information Retrieval, Fall 2020**

### **Assignment 1 - Edit Distance Computation, Due: 20/11/2020 (Friday), 17:00**

**Weight: 5% of your total grade**

---

In this assignment you will implement (i) the Levenshtein edit distance and (ii) the Damerau-Levenshtein edit distance algorithms.

You can use any programming language of your choice. However, we should be able to run your program from the command line. Your program should take two strings as input and it should output the following.

1. (a) The Levenshtein edit distance between the two input string, (b) the corresponding edit table, and (c) the sequence of operations needed to transform the first string into the second one.
2. (a) The Damerau-Levenshtein edit distance between the two input string, (b) the corresponding edit table, and (c) the sequence of operations needed to transform the first string into the second one.

**Submission:** You should submit a “.zip” file named as YourNameSurname.zip containing the following files using the Moodle system:

1. Report: Provide screenshots of running your system for three sample input string pairs.
2. Commented source code and executable. We should be able to run your program from the command line.
3. Readme: Describing how to run your program step by step.

**Honor Code:** You should work individually on this assignment and all the source code should be written by you. You are NOT allowed to use any available libraries or any code written by other people. Violation of the Honor Code will be strictly penalised, not only by a zero grade from the homework, but also by filing a petition to the Disciplinary Committee.

**Late Submission:** You are allowed 7 late days (one week) for this assignment with no late penalty. After 7 days, 10 points will be deducted for each late day.