

CSCI 3151: Assignment 1

Weights are in parentheses.

Q00(0). Download and install R on your computer from the local mirror <http://mirror.its.dal.ca/cran/> Look for an R tutorial online and browse through through it, trying the basic functions mentioned in class.

Q1(30). Solve Ex. 1.4 and 1.5 of [MRS]

Q2(15). Solve Ex. 2.10 of [MRS]

Q3(20). Solve Ex. 6.19 of [MRS].

Q4(40). Lucene Apache is a high-performance open-source search engine. Study carefully the documentation of its similarity scoring mechanism. Describe the differences and extensions with respect to the basic scoring discussed in the lectures, in your own words. (max. 1 page, 1" margins, single spaced, 11pt size)

Q5 (15). Solve Ex. 6.9 of [MRS]

Q6 (15). Solve Ex. 6.11 of [MRS]

Q7 (40). Solve Ex. 6.15 & Ex. 6.17 of [MRS]

Optional questions (for bonus points)

QO1(30). Solve Ex. 1.6 of [MRS]

Additional exercises may be posted up to one week before the due date. It is strongly recommended to start working on the assignment as soon as possible, and to upload solved questions as you complete them (as successive versions of your submission), as per instructions below.

Instructions for submitting the assignment.

Your assignment should have a cover page with the following information:

CSCI 3151 (winter 2016)
Assignment X (where $X = 1, 2, \dots$)
Last name
First name
Banner ID
CS username

The file that you submit for assignment X should be named as:

CSusername-aX.pdf If you submit a supplementary file on a specific question Y, name it as:
CSusername-aX-qY.pdf

Grading: Each question will be graded with a letter grade, based on content (0.7), and quality of writing / neatness (0.3). If the assignment is so poorly written that content becomes difficult to understand with normal effort, then content mark will be further reduced.

Typesetting assignments is labour-intensive due to the mathematics. Therefore, typeset assignments are not required. If your handwriting is not perfectly legible, you may want to type the text, and fill in the math by hand. If you write your assignment by hand, please scan it for submission (use black marker pen for the handwritten parts, scan as black/white into a pdf file to minimize the file size).

The overall grade for the assignment will be a weighted average of the individual grades. Letter grades are being averaged using their GPA equivalent. No rounding takes place. The meaning of the grades is as per the University Calendar, section 17.1. This style of grading will be used in all evaluation components of this course.