CSCI 2141 W2013 Assignment 6, Due 9:35 am, April 8, 2013 Groups of up to 3 students permitted.

Submission instructions: Submit an electronic copy of your assignment (SCAN your work as a PDF if needs be, scanner located by tech support on 1st floor). Email your assignment to the TA, Savneet Arora (<u>sarora@cs.dal.ca</u>). In the subject line, use the following template: 2141 Assignment-6 (Banner ID(s))

The learning goal for this assignment is that you gain some practical experience about query optimization and learn how to get started if you needed to ever improve the performance of your queries.

As a group or as individuals, spend no more than 1.5-2 hours exploring how to optimize databases (structure and/or queries) in MySQL (or in the database of your choice). This is a big topic, so choose some subset of the information as a starting point. Learn how to use the EXPLAIN command to learn about the query execution plan, etc. Spend the time learning how to analyze your queries, try optimization techniques, etc.

http://dev.mysql.com/doc/refman/5.0/en/optimization.html http://dev.mysql.com/doc/refman/5.0/en/using-explain.html

You can either use one of the db's that you have generated for an assignment or your project (you may want to insert lots of rows of random data) or try using a sample db such as one of the ones found here:

http://dev.mysql.com/doc/index-other.html

(If you try installing a sample database and that evolves into its own learning exercise, document that instead!)

As you go, keep a record of what you tried and what you learned and submit it in the form of a brief report (can be in the form of a table or bullet points – just some record of your experience). You can include screen shots or sql statements or just use broad textual descriptions. Success and failure are equally interesting as long as you are able to document what you learned from the process.

Do not spend longer than 2 hours on this assignment.