# COSC3380 HW0: Set Operations with SQL Queries

## 1 Introduction

You will develop SQL queries to compute basic set operations on sets of integers. The integers will be stored in 1-column tables.

## 2 Input and output

The input is one or two tables, specified in the query. The tables will have fixed names and column names will also be fixed as follows: $A(i), B(i)$. Keep in mind your queries will be automatically tested: do not change names.

Set operations: $A \cup B, A \cap B, A \subset B$.

## 3 Requirements

- Programming language: SQL
- Set operations: union, intersection, containment.

  Union/intersection must return the result table. Set containment must return a 1-row table with true/false evaluating if 1st table is contained in the 2nd table.
- Your can create your own input tables, but the TAs will test with their own tables, with different content.
- You can create temp tables to solve each set operation step by step.
- No nulls
- integers may be repeated
- number of rows can reach hundreds
- Folder and file name to be specified by TA. Example /hw0/intersect.sql.
- The output must be produced sorted with the ORDER BY clause.
- SQL must have comments, including your name.
- SQL must be indented, following the style from the textbook.
- If you find some requirement difficult and you do not implement it you can include a comment in your README file explaining why.

- Correctness is the most important requirement: TEST your program with many expressions. Your program should not crash or produce exceptions.
- Query execution: Your queries must be correct (syntax, valid tables, valid columns).