

# COP 4710-RVC

## Spring 2018

### Project Specification

**Due Date: Mar. 8 (Thursday), 2018 2 PM.**

#### Project Description:

Please write SQL queries to update tables extract the following information. Write your queries based on the database you developed in the previous project. For each question, write a SQL query and save it as a **“.sql” file** using a different query name, for example, query1, query2, etc. Please execute these queries sequentially.

#### Courses:

<i>course_id</i> (PK)	<i>description</i> (Not Null)	<i>level</i> (Not Null)	<i>instructor</i> (FK)	<i>semester</i>
1	Fundamentals of Computer Sys.	ugrad	1	Spring 2018
2	Software Engineering I	ugrad	2	Spring 2018
3	Computer Programming I	ugrad	2	Spring 2018
4	Introduction to Algorithms	grad	4	Fall 2017
5	Operating Systems	grad	5	Fall 2017
6	Software Design	grad	6	Spring 2017
7	Advanced Database	grad	5	Spring 2017

<b>Query 1</b>	Update the <b>Courses</b> table by adding another column as shown above.
<b>Query 2</b>	Retrieve all the courses (description) open in year 2018.
<b>Query 3</b>	List the name(s) of all the graduate course(s) taught by Steven Garden.
<b>Query 4</b>	List the name(s) of instructor(s) who taught course(s) in Spring 2017.
<b>Query 5</b>	Retrieve all the courses (as well as grades) Alice Wood has taken, ordered by grades.
<b>Query 6</b>	List the name(s) of the faculties who offer(s) more than one courses.
<b>Query 7</b>	List the names and grades of the students who take the course “Fundamentals of Computer Sys.”, ordered by grades.
<b>Query 8</b>	List the name(s) of the faculties who offer(s) at least one graduate course and is (are) born after 1979.
<b>Query 9</b>	List the name(s) of the student(s) who get(s) grade B for at least one undergraduate course.
<b>Query 10</b>	List the name(s) of the student(s) and the highest grade for each student. (ASCII

	value)
<b>Query 11</b>	Group and count the grades of all the courses taken by Alice Wood, ordered by grades (Please reference to both tables of <i>Students</i> and <i>Enroll</i> ).
<b>Query 12</b>	List the names of the students and ordered by ages. (Show age in the output result)

### Query 13

Create the following table:

**title:**

<i><b>name (PK)</b></i>	<i><b>abbreviation</b></i>
Instructor	Instr
Associate Professor	AP
Professor	Prof

Update the column values in “level” in the table *Faculties* by replacing them with their corresponding abbreviation. For example, Associate Professor should be updated to AP.

### Submission

For all the students, you need to upload your homework to Moodle system. For each question, write a SQL query and save it as a “.sql” file using a different query name, for example, query1, query2, etc.