

PROG8081: Programming - Database Management
Spring 2024 - Sec 4 - Assignment 1

Use the **SIS** database to answer the following questions:

#	Question	Table(s)	Marks
	SQL Coding Rules: One point deduction for <i>each</i> requirement not met.		
(a)	Add SQL using the SQL Coding Standards. Both .SQL script and .rpt files need to be submitted.		
(b)	Display the school term, course code, section number, student name and current date.		
(c)	Use the appropriate database.		
(d)	The RPT file (answer key) is not provided for PROG8081 assignments. <i>Do not tamper or manually change any contents in your generated RPT file.</i>		
	Single-table SELECT		
1	List the province code the persons are from, but show each province code only once (i.e., no duplicates). List the results in descending order by province code. <i>Number of rows expected: 5</i>	Person	2
2	List the province code the persons are from (i.e., no duplicates) with the NULL value excluded in the output. <i>Number of rows expected: 4</i>	Person	2
3	List <i>number, last name, first name, city, and country</i> for persons who does not have a province code assigned. <i>Number of rows expected: 41</i>	Person	2
4	List all data from the Program table with program name that starts with 'Computer'. <i>Number of rows expected: 3</i>	Program	3
5	List the <i>code, acronym and name</i> of the programs with program name that contains 'coop'. <i>Number of rows expected: 4</i>	Program	3
6	List all data for students with <i>final mark</i> that is lower than 55. Do not display <i>final mark</i> that is zero. <i>Number of rows expected: 11</i>	CourseStudent	3
7	List the <i>number, capacity and memory</i> of any room that has a capacity greater than or equal to 40, is a lab, has computers with 4GB memory, and is located at the Doon campus. <i>Number of rows expected: 1</i>	Room	5
8	List all employees who teach in the School of Trades and Apprenticeship and are located at the Doon, Guelph or Waterloo campus. <i>Number of rows expected: 3</i>	Employee	5
	Scalar Functions		
10	List the "last name" and the "user id" for all persons whose last name starts with 'J'. The user id consists of the first letter of the first name and the first seven letters of the last name, all in lower case. Alias the user id 'User ID', and sort the results in descending 'User ID' order. Use either LEFT() or SUBSTRING() as you wish. <i>Number of rows expected: 10</i>	Person	5
11	List <i>number, birth date</i> aliased as 'dob', and calculated age aliased as 'age', for persons that are over 60 years old as of today. Use FORMAT() to display 'dob' in the format similar to "January 01, 2022". Use DATEDIFF() to calculate the 'age'. <i>Number of rows expected: 5</i>	Person	3
12	List <i>number</i> aliased as 'Course Code' and <i>name</i> aliased as 'Course Name' for all courses that have the word 'Game' in their name. Use CHARINDEX() as part of your solution. <i>Do not use LIKE. Number of rows expected: 2</i>	Course	2
			35