Seneca College
Applied Arts & Technology
SCHOOL OF COMPUTER STUDIES

JAC444 **Submission date:** **April 18, 2021**

Workshop 11

Description:
The following workshop lets you practice basic java coding techniques, creating classes, methods, using arrays, Java I/O, inheritance, polymorphism, Exceptional Handling, JDBC.

Task 1:

The following three tables store information on **students**, **assigned exercises**, and **exercise submission** in LiveLab.
LiveLab is an automatic grading system for grading programming exercises.

Table - 1

```
create table AGSStudent (
username varchar(50) not null,
password varchar(50) not null,
fullname varchar(200) not null,
instructorEmail varchar(100) not null,
constraint pkAGSStudent primary key (username)
);
```

Table - 2

```
create table ExerciseAssigned (
instructorEmail varchar(100),
exerciseName varchar(100),
maxscore double default 10,
constraint pkCustomExercise primary key (instructorEmail, exerciseName)
);
```

Table - 3

```
create table AGSLog (
username varchar(50), /* This is the student's user name */
exerciseName varchar(100), /* This is the exercise */
score double default null,
submitted bit default 0,
constraint pkLog primary key (username, exerciseName)
);
```

- The **AGSStudent** table stores the student information.
- The **ExerciseAssigned** table assigns the exercises by an instructor.
- The **AGSLog** table stores the grading results.
- When a student submits an exercise, a record is stored in the **AGSLog** table.
- However, there is no record in **AGSLog** if a student did not submit the exercise.

Write a program that adds a new record for each student and an assigned exercise to the student in the **AGSLog** table if a student has not submitted the exercise. The record should have **0** on **score** and **submitted**.
For example, if the tables contain the following data in **AGSLog** before you run this program, the **AGSLog** table now contains the new records after the program runs.

AGSStudent

username	password	fullname	instructorEmail
abc	p1	Kyle Wright	a@senencacollege.ca
cde	p2	Yao Mi	c@senecacollege.ca
wbc	p3	Jack Jill	w@senecacollege.ca

ExerciseAssigned

instructorEmail	exerciseName	maxScore
a@senencacollege.ca	e1	10
a@senencacollege.ca	e2	10
w@senecacollege.ca	e1	4
w@senecacollege.ca	e4	20

AGSLog

username	exerciseName	score	submitted
abc	e1	9	1
wbc	e2	7	1

AGSLog after the program runs

username	exerciseName	score	Submitted
abc	e1	9	1
wbc	e2	7	1
abc	e2	0	0
wbc	e1	0	0
cde	e1	0	0
cde	e4	0	0

JavaFX is not required for the output. You can design your output the way you want. Also include your database scripts as well with your submissions.

Workshop Header

/***

Workshop #

Course:*<subject type> - Semester*

Last Name:*<student last name>*

First Name:*<student first name>*

ID:*<student ID>*

Section:*<section name>*

This assignment represents my own work in accordance with Seneca Academic Policy.

Signature

Date:*<submission date>*

***/

Code Submission Criteria:

Please note that you should have:

- Appropriate indentation.
- Proper file structure
- Follow java naming convention
- Document all the classes properly
- Do Not have any debug/ useless code and/ or files in the assignment
- Do not have everything in the *main method*.
- Have a separate TestClass with the main method in it.
- Check your inputs if the user is not entering garbage inputs.
- Use exceptional handling or other methods to let the user know if the inputs are incorrect.

Deliverables and Important Notes:

All these deliverables are supposed to be uploaded on the blackboard once done.

- You are supposed to create video/ record voice/ detailed document of your running solution. **(40%)**
    - Screen Video captured file should state your last name and id, like Ali_123456.mp4 (or whatever the extension of the file is)
    - Record voice clip should also include a separate word file with the screen shots of your program's output, state your last name and id, like Ali_123456.mp3 (or whatever the extension of the file is)
    - Detailed document should include screen shots of your output, have your name and id on the top of the file and save the file with your last name and id, like Ali_123456.docx (or whatever the extension of the file is)
- A word/ text file which will reflect on learning of your concepts in this workshop. (Also include the instructions on how to run your code. Which is only required if you have any special instructions for me on how to run your code.) **(30%)**
    - Should state your Full name and Id on the top of the file and save the file with your last name and id, like Ali_123456.txt
- Submission of working code. **(30%)**
    - Make sure your follow the "**Code Submission Criteria"** mentioned above.
    - You should zip your whole working project to a file named after your Last Name followed by the first 3 digits of your student ID. For example, **Ali123.**zip.
- Your marks will be deducted according to what is missing from the above-mentioned submission details.
- Late submissions would result in additional 10% penalties for each day or part of it.
- Remember that you are encouraged to talk to each other, to the instructor, or to anyone else about any of the assignments, but the final solution may not be copied from any source.