THE OPEN UNIVERSITY OF SRI LANKA
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
BACHELOR OF SOFTWARE ENGINEERING PROGRAM

EEI4366/EEX4366
Data Modelling and Database Systems

Answers to this Mini Project should be uploaded to the Moodle class drop box only. (Answers should be clear, and readable. Unclear, unreadable, copied, and direct reproduction from the textbooks will not gain any points for the answers. Delayed submissions will count minus marks.)

Mini Project due date 11th November 2022

The evaluation of the mini project will be done based on a **demonstration(viva)** of your database (DB creation , population and queries). This demonstration will consist of running your SQL script and answering questions as requested by the lecturer.
Please note that you will **NOT** be awarded any marks for the Mini Project, if you are **unable to present** for the demonstration or **unable to demonstrate sufficient understanding** of your work..

Demonstration (VIVA) date and time will be posted in Moodle.

You are required to **use the database** you created and populated for TMA 2. And do any modifications to the database you created based on the queries given in the mini project. Use updated database and data, if you made changes to the database you submitted for TMA 2.

Guidelines:

- Create your SQL scripts using Microsoft SQL Server Management Studio (SSMS) or any other DBMS.
- Make sure your SQL scripts run without resulting in any errors.
- Format your SQL queries to improve readability and use comments where necessary.
- You need to include evidence for the results of each SQL query.

Q1) Create a **view** which shows all the **details of software developers** in the company. The view should include their full name, contact number, mentor name, branch they work, monthly pay and their salary scale.

Q2) Write a SQL query to show all the **project details** including Project ID, name of the project manager, client involved in each project, project type and project duration. Order the results by project start date to show the most recent project on top of the query result.

Q3) Write a query that selects all details of any projects which are fully paid.

Q4) Write a query to display all the projects for any clients who have an email with @ou.ac.lk email address.

Q5) Write a SQL query to find Software developer's Specializations. display the different project types and the software developer's full name who specialize in each Project type. Order your result by project type name.

Q6) Write a SQL query to show first name, last name, employment date, salary scale and min experience of any employee who has been working at the company for less than the minumum number of years expected for their pay level.

Q7) Produce a query that shows the full name, contact no, email, and total unpaid project costs of any clients who have LKR20,000 owing or above on projects that were completed at least 10 days before. Order the results to show the largest amount owing at the top and your result should be grouped per client.

***Note** : Include all your SQL statements with evidence of query results (.jpeg) into your Mini Project report.)*

-- End of the Mini Project --