Project 3

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SP1 - (10% points) SP to use cursor(s)

Stored Procedure Name: **UpdateSalaryWithJobLogic**

Purpose: The UpdateSalaryWithJobLogic stored procedure is designed to intelligently adjust the annual salary of employees based on a set of business rules. This stored procedure utilizes a cursor to iterate through a result set obtained by joining three tables: EmployeeInfo, User, and EmployeeJobs. The primary focus is to identify employees aged 25 or older and, for a specific set of job roles (JobIds 5, 7, 9, 11, 13), grant a 7% increase in their annual salary. For other job roles, a 5% increase is applied.

SP2 - (10% points) SP to update data in a table (perform validation)

Stored Procedure Name: **UpdateEmployeeDataWithValidation**

Description : This stored procedure is designed to update employee data with validation checks. It takes input parameters such as @EmployeeId (for identifying the employee), @NewSalary (the updated annual salary), and @NewJobTitle (the updated job title).

Validations :
- Verifies whether the specified employee exists in the **EmployeeInfo** table.
- Validates that the new salary provided (**@NewSalary**) is not negative.
- Validates that the new job title provided (**@NewJobTitle**) exists in the **JobInfo** table.

SP3 - (10% points) SP to delete data from a table

Stored Procedure Name**: DeleteClassroom**

Description: The stored procedure DeleteClassroom is designed to facilitate the secure deletion of a classroom record from the ypatel02.Classroom table in our project database. Ensure number of classrooms available in a building gets updated accordingly and sets classroom of classes to be null if that classroom was removed.

SP4 - (10%+5% bonus points) 1 SP of your own choice, performing a business action[1].

Stored Procedure Name : **UpdateStudentStatusToGrad**

Description **:** The stored procedure UpdateStudentStatusToGrad automates the process of updating a student's graduation status within the educational system. This checks Grades obtained in courses enrolled during his study and will not allow to graduate if he has failed one or more subjects.

Validations :
  - Check if Student Exists
  - Check if Student Failed one or more Courses.
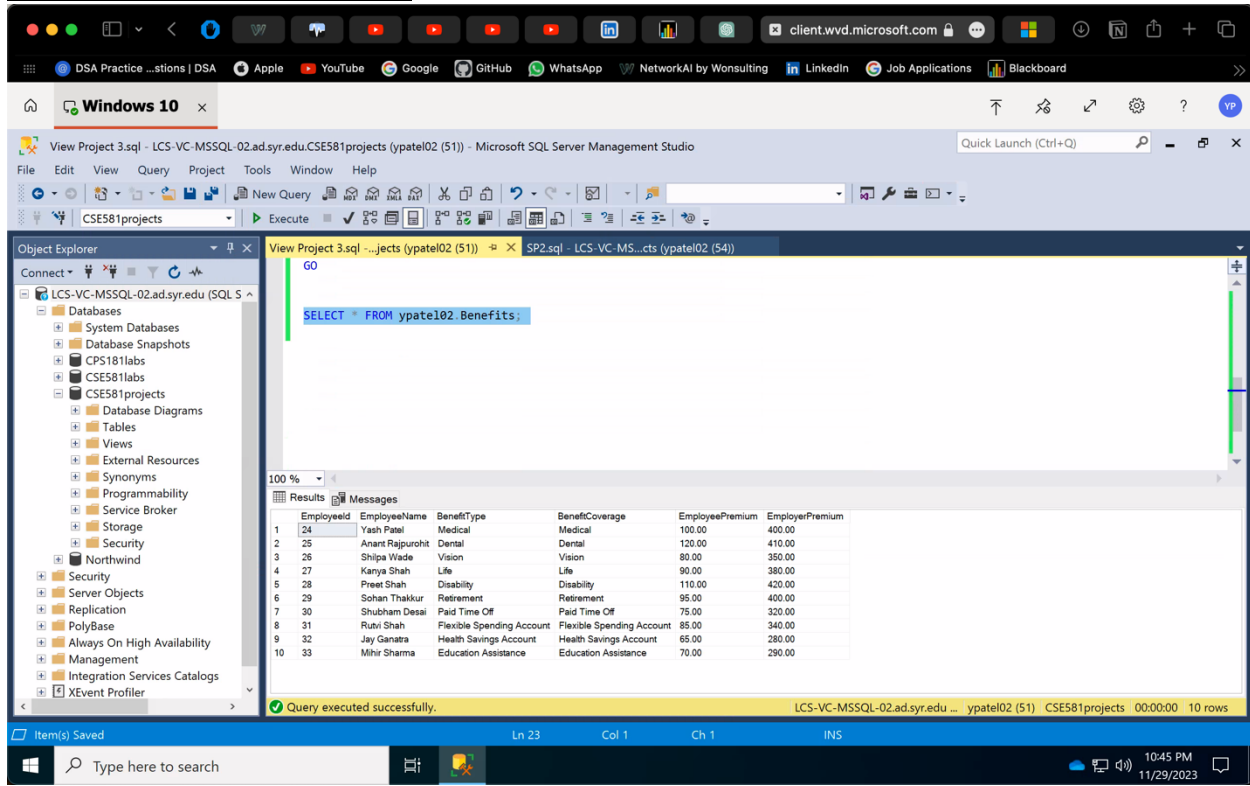 - Checks if Student already Graduated.

Function - Create 1 _Function_ (10% points) which can be executed by "Graders". Not the function you did for the lab.

Function Name : **FindAvailableClassrooms**

Description : This function, ypatel02.FindAvailableClassrooms, is designed to find available classrooms for a specified day of the week and time range. It utilizes information from the ypatel02.Classroom, ypatel02.CourseDailySchedule, and ypatel02.CourseSchedule tables. The function identifies classrooms that are not scheduled for courses during the specified period, considering both the end and start times of the courses. Additionally, it handles cases where ClassRoomId is NULL in the CourseSchedule table. The result is a list of distinct available ClassRoomIds meeting the given criteria.

View - You will also *create a view* (named as "Benefits") (10% points) which can be viewed by "Graders" (GRANT SELECT ON SCHEMA::[yourSchema] TO Graders;) that shows every employee's name, ID, benefit's type, benefit coverage, employee premium and employer premium.

Execution of Benefits View

GRANTING ACCESS TO GRADERS