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**SQL Practical Assignment**

**Objective**

The goal of this assignment is to reinforce your understanding of SQL basics, data relationships, queries, and aggregation functions. You will create a database, tables, and establish relationships between them. You will also perform various SQL operations like data insertion, updating, deletion, and querying.

**Task 1: Create a Database**

1. Create a new database called **[Your EmployeeID]\_DB**. Sample DB name: 4875\_DB

**Task 2: Create Tables**

1. Create a table called Students with the following columns:

StudentID (Primary Key)

FirstName

LastName

Age

CourseID (Foreign Key)

1. Create another table called Courses with the following columns:

CourseID (Primary Key)

CourseName

**Task 3: Insert Data**

1. Insert at least 5 records into the **Courses** table.
2. Insert at least 10 records into the **Students** table, making sure to associate students with courses.

**Task 4: Update and Delete Records**

1. Update the age of one of the students.
2. Delete a record from the Students table.

**Task 5: Queries and Filters**

1. Write a query to list all students older than 20.
2. Write a query to list all students enrolled in a specific course, along with the course name.

**Task 6: Aggregation Functions**

1. Use the COUNT function to find the total number of students.
2. Use the AVG function to find the average age of students.

**Task 7: Selection queries**

1. List the names of students who are not enrolled in any course.
2. Find the most popular course (the course with the most students enrolled).
3. List the students who are older than the average age of students.
4. Find the total number of students and average age for each course.
5. List the courses that have no students enrolled in them.
6. List students who share courses with a specific student (choose one from your records).
7. For each course, list the youngest and oldest student.