Text

Description automatically generated

**CSE302: Report on Lab Tasks**

**Lab Number: 05**

Lab Activities

|  |  |
| --- | --- |
| Student ID | 2019-1-60-024 |
| Student Name | Adri Saha |
| Course Name | Database Management System |
| Course Code | CSE302 |
| Section | 01 |

**Submitted to:**

Dr. Mohammad Rezwanul Huq

Associate Professor,

Department of Computer Science & Engineering

**Experiment Name**: Introducing Nested Subqueries and Outer Joins in SQL

Date of submission: 04 August 2021

**Lab Activities**

Graphical user interface, text, application, email

Description automatically generated

1. IN / NOT IN
2. Find courses offered in Fall 2009 and in Spring 2010

Graphical user interface, text, application

Description automatically generated

1. Find courses offered in Fall 2009 but not in Spring 2010

Graphical user interface, text, application

Description automatically generated

1. Find the total number of (distinct) students who have taken course sections taught by the instructor with ID 10101

Graphical user interface, text, application

Description automatically generated

1. SOME / ALL
2. Find names of instructors with salary greater than that of some (at least one) instructor in the Biology department.

Graphical user interface, text

Description automatically generated

1. Find the names of all instructors whose salary is greater than the salary of all instructors in the Biology department.

Text

Description automatically generated

1. EXISTS/NOT EXISTS
2. Find all courses taught in both the Fall 2009 semester and in the Spring 2010 semester

Text

Description automatically generated

1. Find all courses taught in Fall 2009 semester but not in the Spring 2010 semester

Text, letter

Description automatically generated

1. Find all students who have taken all courses offered in the Biology department.

Text, letter

Description automatically generated

Subqueries in the FROM clause

1. Find the average instructors’ salaries of those departments where the average salary is greater than $42,000

Using having,

Graphical user interface, text, application, email

Description automatically generated

Using subquery:

Table

Description automatically generated

➔ Complex Queries using WITH clause

1. Find all departments with the maximum budget.

Text

Description automatically generated

1. Find all departments where the total salary is greater than the average of the total salary at all departments

Text, letter

Description automatically generated

➔ Subqueries in the SELECT clause (Scalar Subquery)

1. Find number of instructors for each department

Text

Description automatically generated