

Database Design & SQL

Student ID :

Student Name :

Practical Exercise 17_18_19_20

Perform the following operations using SQL Script and provide **relevant screen shots in each case** (use [Oracle/Oracle Live](#))

Practical Activity #1

Create the following tables using a SQL Script;

1. Table Name **Students_{YourStudentID}** e.g Students_C0697697

Student_ID (PK)	Varchar(25)
FirstName	Varchar(50)
LastName	Varchar(100)
Telephone	Varchar(10)
Age	integer
City	Varchar(10)

2. Table Name **Courses_{YourStudentID}** e.g Courses_C0697697

Student_ID (PK,FK)	Varchar(25)
CourseCode	Varchar(50)
Marks	Integer

Practical Activity #2

1. Add a **Primary Key** Constraint to Student_ID (Table Level Constraint)
2. Add a **NOT NULL** Constraint to LastName (Column Level Constraint)
3. Add a **UNIQUE** Constraint to Telephone_Number (Table Level Constraint)

Practical Activity #3

4. Add a **CHECK** Constraint to Age (> 18) (Column Level Constraint)
5. Add a **DEFAULT** Constraint to City (Default city 'Toronto') (Any)

Practical Activity #4

6. Create **FOREIGN KEY** Constraint - Perform Delete / Insert Operations to check

Note: Apply these **constraints one by one** (not all at once). Drop the table(s) and recreate each time.

For named constraints use your firstname (e.g sagara_uk)

Enter some data to prove that constraints were applied correctly. Provide relevant screen shots for each case.