Lab 3 & Lab 4 – DDL Commands & Constraints

Objective: At the end of the assignments, participants will be able to understand basic DDL, Create table with constraints, Alter, Truncate, Drop and Rename

Student has to submit a file named as < Group No._Branch_Lab Group_Day3> with the complete solution.

Exercise -1:

1. Complete the GRADUATE CANDIDATE table instance chart. Credits is a foreign-key column referencing the requirements table.

Column Name	student_id	last_name	first_name	credits	graduation_date
Key Type					
Nulls/Unique					
FK Column					
Datatype	NUMBER	VARCHAR2	VARCHAR2	NUMBER	DATE
Length	6			3	

2. Write the syntax to create the grad_candidates table.

3. Confirm creation of the table.

4. Create a new table using grad_candidates with the following syntax:
   CREATE TABLE o_grad_candidates AS (SELECT * FROM grad_candidates);

5. Create a new table using a subquery. Name the new table your first name -- e.g., gaurav_table. Using a subquery, copy grad_candidates into gaurav_table.

6. In your o_grad_candidates table, enter a new column called “adm_date.” The datatype for the new column should be VARCHAR2. Set the DEFAULT for this column as SYSDATE.

7. In your o_grad_candidates table, increase the length of last_name column by 10 and remove the credits column.

8. Create a new column in the smith_table table called start_date. Use the TIMESTAMP WITH LOCAL TIME ZONE as the datatype.

9. Write syntax to change the name of credit column by grad_credit.

10. Insert 5 tuples in gaurav_table.

11. Truncate the gaurav_table table. Then do a SELECT * statement. Are the columns still there?

12. What the distinction is between TRUNCATE and DROP for tables?

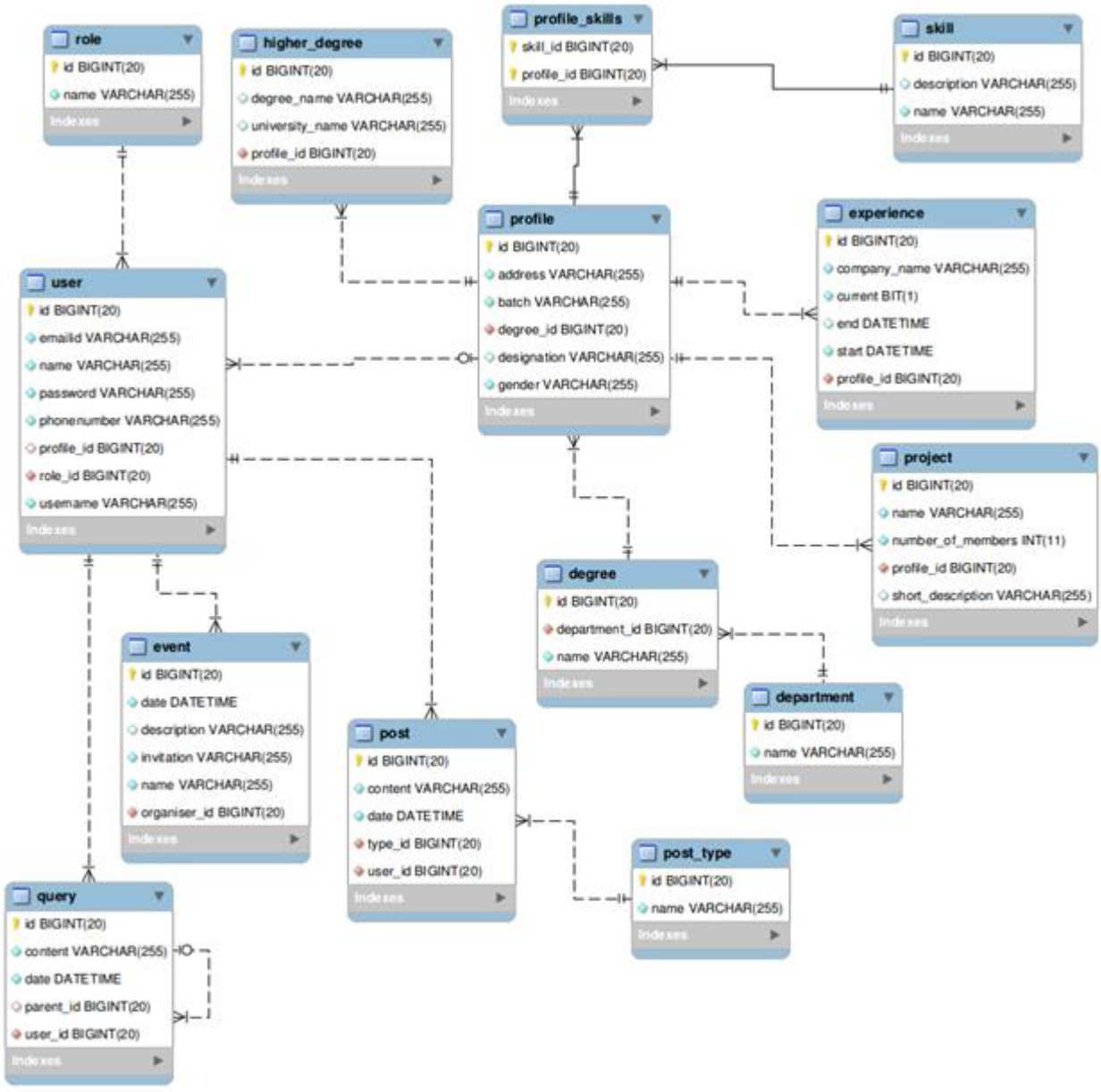
13. List the changes that can and cannot be made to a column.

14. Rename o_grad_candidates to n_grad_candidates.

Exercise -2:

1. Convert the ER Diagram into a neat and clean relational model.
2. Create all the tables using SQL commands.
3. Show all the tables with the constraints of your case study. Explain the reason of implementing that constraint on the required columns.

Bonus Exercise -3:



Q-1) Write a query to create profile_skills table.
Q-2) Write a query to create user table.
Q-3) Write a query to create role table.
Q-4) Write a query to create department table.
Q-5) Write a query to create degree table.
Q-6) Write a query to create profile table.
Q-7) Write a query to create higher_degree table.
Q-8) Write a query to create experience table.
Q-9) Write a query to create skill table.
Q-10) Write a query to add a new column named description of type varchar (255) to role table.
Q-11) Write a query to change the type of field description in the role table to varchar (500).
Q-12) Write a query to remove the column description from the role table.