**Lab # 9**: Database Systems Lab

***Objective:*** *To evaluate proper delivery, authenticity and level of content digestion of the knowledge and ideas conveyed during last lecture. This lab will also help the students to appraise their current level of preparation of this subject.*

***Instructor:*** *Asim Rasul (asim @ pucit.edu.pk ) Date:09-05-2018*

1.

Create the Student table based on the following table instance chart.

Name Type  
 ---------- -----------

ROLL NO VARCHAR2(25)

NAME VARCHAR2(25)

SESSION ID VARCHAR2(25)

DEGREE TITLE VARCHAR2(25)

GPA FLOAT

SEMESTER NUMBER(2)

DEPT ID NUMBER(7)

2.

Create an INSERT statement to add the first row of data to the Student table from the following sample data. Do not list the columns in the INSERT clause.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| RollNo | Name | Session ID | Degree Title | GPA | Semester | Dept ID |
| BITF16A001 | Ali | F16 | BIT | 3.40 | 3 | 10 |
| BSEF14A002 | Anas | F14 | BSE | 3.50 | 7 | 20 |
| BITF16A003 | Abdullah | F16 | BIT | 3.67 | 3 | 10 |

..

3. Populate the STUDENT table with data. This time, list the columns explicitly in the INSERT clause. Enter at least 7 rows.

4. Modify the STUDENT table by adding a column LAST NAME and CGPA with their appropriate types. And rename the column ‘NAME’ to ‘FIRST NAME’.

5. Modify the STUDENT table by adding a column DateOfAdmission. The format of date must be like this 12/20/2017.

6. Modify the STUDENT table to allow for longer employee last names. Confirm your modification.

Name Null? Type

------------- -------- -----------

ROLL NO VARCHAR2(25)

LAST\_NAME VARCHAR2(50)  
 FIRST\_NAME VARCHAR2(50)

SESSION ID VARCHAR2(25)

DEGREE TITLE VARCHAR2(25)

GPA DECIMAL

CGPA DECIMAL

SEMESTER NUMBER(2)

DEPT ID NUMBER(7)

7. Modify the STUDENT table. Concatenate the first letter of the first name and the first seven characters of the last name to produce the **userid**. For example

|  |  |  |
| --- | --- | --- |
| Maryam | Usman | MUsman |

8. Change the last name of Student with rollno BITF16A003 to Mahmood.

9. Change the DEGREE TITLE to ‘BCS’ for all students with a GPA greater than 3.5.

10. Delete the rows with DEPT ID=20 from STUDENT Table.

11. Create the EMPLOYEE1 table based on the structure of the EMP table. Include only the EMPNO, ENAME, and DEPTNO columns. Create EMPLOYEE2 table and Name the columns in your new table ID, LAST\_NAME, and DEPT\_ID, respectively.

13. Drop the EMPLOYEE1 table.

12. Rename the EMPLOYEE2 table to EMPLOYEE1.