

National University of Computer and Emerging Sciences, Lahore Campus

Assignment 1 Database System

TOPIC: DDL, DML, Constraints

Deadline: 18 Feb 2024 (Word file with results)

Part 1:

Comparative analysis of Date (MySQL, Oracle, SQL Server) data types, related functions and usage in different forms in queries.

Part 2:

Q 1: Create the DEPARTMENT table based on the following table instance chart.

Name	Null	Type
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ID		Number (7)
NAME		VARCHAR2 (25)

Q2: Populate the DEPARTMENT table with some data. Include only columns that you need.

Q3: Create the EMPLOYEE table based on the following table instance chart.

Name	Null?	Type
-----	-----	-----
ID		NUMBER (7)
LAST_NAME		VARCHAR2 (25)
FIRST_NAME		VARCHAR2 (25)
DEPT_ID		NUMBER (7)

Q4: Create a MY_EMPLOYEE table. Describe the structure of the MY_EMPLOYEE table to identify the column names.

Name	Null?	Type
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ID	NOT NULL	NUMBER (4)
LAST_NAME		VARCHAR2 (25)
FIRST_NAME		VARCHAR2 (25)
USERID		VARCHAR2 (8)
SALARY		NUMBER (9, 2)

Q 5: Add the first row of data to the MY_EMPLOYEE table from the following sample data. Do not list the columns in the INSERT clause.

ID	LAST_NAME	FIRST_NAME	USERID	SALARY
---	-----	-----	-----	-----
1	Patel	Ralph	rpatel	795
2	Dancs	Betty	bdancs	860
3	Raza	Hassan	Hraza	700
4	ali	Raza	rali	989

Q 6: Populate the MY_EMPLOYEE table with the second row of sample data from the preceding list. This time, list the columns explicitly in the INSERT clause

Q 7: Confirm your addition to the table.

ID	LAST_NAME	FIRST_NAME	USERID	SALARY
---	-----	-----	-----	-----
1	Patel	Ralph	rpatel	795
2	Dancs	Betty	bdancs	860

Q8: Change the last name of employee last_name 'Dancs' to 'Hammad'

Q9: Change the salary of all those employees who have a letter 't' in their name with salary between 500-2000 to 3000

Q10: Delete an employee who have salary greater than 5000

Q11: Create the "MYEMP1_ (Your Roll #)", "MYDEPT1_ (Your Roll #)" tables based on the following table instance chart. Confirm that the table is created.

Column Name	ID	NAME	DEPT_ID
Key Type	Primary Key		Foreign Key
Nulls/Unique			
FK Table			
FK Column			
Data type	Number	VARCHAR2	Number
Length	7	25	3

Column Name	Department_ID	NAME	Location
Key Type	Primary Key		
Nulls/Unique			
FK Table			
FK Column			
Data type	Number	VARCHAR2	VARCHAR2
Length	3	25	15

Q12: Modify the above table to allow for longer employee names. Confirm your modification.

Q13: Modify the above table to allow for employee ID to length 12. Confirm your modification.

Q14: Populate MYDEPT1_ (Your Roll #) with data from the DEPT table. Include only columns that you need.

Q15: Insert a row in MYEMP1_ (Your Roll #) with id="your ID", name="your name" and dept_id = 100 (In both cases 1) inserted 2) not inserted write reason)

Q16: Rename the "MYEMP1_ (Your Roll #)" table to "EMP1_ (Your Roll #)" and "MYEMP2_ (Your Roll #)" to "EMP2_ (Your Roll #)"

Q 17: Drop the NAME column from the EMP2_ (Your Roll #) table. Confirm your modification by checking the description of the table.

Q18: Drop the EMP1_ (Your Roll #) table. And confirm your work.

***** Best of Luck *****

