**19B21A0435**

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**SQL Assignment 2**

**1.For an online purchasing database, create entity relationship diagrams. Create a database object from your entity diagram.**

Ans:-

     An Entity Relationship Diagram (ERD) is a visual representation of **different entities within a system and how they relate to each other**. For example, the elements writer, novel, and a consumer may be described [using ER diagrams](https://creately.com/diagram/example/h98ohk101/high%20school%20) the following way:

**2.Create a SQL store process to register the use of the database, complete it with proper validation and transaction rollback and commit.**

**Ans:-**

COMMIT in SQL is a transaction control language that is used to permanently save the changes done in the transaction in tables/databases.

**Use the COMMIT statement to end your current transaction and make permanent all changes performed in the transaction**. A transaction is a sequence of SQL statements that Oracle Database treats as a single unit. This statement also erases all savepoints in the transaction and releases transaction locks.

**3.List the SQL aggregate function and demonstrate how to utilize it.**

**Ans:-**

· AVG – calculates the average of a set of values.

· COUNT – counts rows in a specified table or view.

· MIN – gets the minimum value in a set of values.

· MAX – gets the maximum value in a set of values.

· SUM – calculates the sum of values.

**4.In SQL, create a pivot query.**

**Ans:-**

First, we **retrieve all unique values from a pivot column and after that we will write a dynamic query to execute it with pivot query at run time**.  
...  
**Example 2**

1. SELECT Name, 2010,2011,2012 FROM.

2. (SELECT Name, [Year] , Sales FROM Employee )Tab1.

3. PIVOT.

4. (

5. SUM(Sales) FOR [Year] IN (2010,2011,2012)) AS Tab2.

6. ORDER BY Tab2.Name.

**5.With an example, describe how to join in SQL.**

**Ans:-**

SQL JOIN. **A JOIN clause is used to combine rows from two or more tables, based on a related column between them**. Notice that the "CustomerID" column in the "Orders" table refers to the "CustomerID" in the "Customers" table. The relationship between the two tables above is the "CustomerID" column.

6.How to locate the 4th highest value in a column in a row. Create your table.

Ans:-

**Using this function we can find the nth highest value using the following query.**

1. DECLARE @nthHighest INT = 2. ...

2. DECLARE @nthHighest INT = 2.

3. ;WITH CTE(EmpId,Empcode,Name,Salary,EmpRank)

4. SELECT EmpId,Empcode,Name,Salary,

5. DENSE\_RANK() OVER(ORDER BY Salary DESC) AS EmpRank.

6. SELECT \* FROM CTE WHERE EmpRank = @nthHighest.