Database Technologies – Assignment 6

Note: use "sales" database to solve below queries.

Create appropriate indexes to solve following problems.

- 1. Create an index that will enable a user to pull orders for '1990-10-03' out of the Orders table quickly.
- 2. If the Orders table has already been created, how can you force the onum field to be unique (assume all current values are unique)?
- 3. Create an index that would permit salesperson to retrieve his orders.
- 4. Let us assume that each salesperson is to have only one customer of a given rating, and that this is currently the case. Create an index that enforces it.
- 5. Create an index to speed up searching order on a given date by given customer.

Database Technologies – Assignment 6

Note: use "classwork" database to solve below queries.

Use ALTER statement to solve following problems.

- 1. Write a SQL statement to rename the table EMP to EMPLOYEE.
- 2. Write a SQL statement to add a column region to the table DEPT.
- 3. Write a SQL statement to add a **dummy_ID** as the first column of the table **DUMMY**.
- 4. Write a SQL statement to add a column **position** after **grade** to the table **SALGRADE**.
- 5. Write a SQL statement to change the data type of the column **sal** to **float** in the table **EMP**.
- 6. Write a SQL statement to drop the column **region** from the table **DEPT**.
- 7. Write a SQL statement to change the name of the column **job** to **designation** from **EMP** table, keeping the data type and size same.

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Note: use "sales" database to solve below queries.

Implement following constraints as given in question.

- 1. Write a SQL statement to add a **primary key** for the columns **SNUM** in the **SALESPEOPLE** table.
- 2. Write a SQL statement to add a **primary key** for the columns **CNUM** in the **CUSTOMERS** table.
- 3. Write a SQL statement to add a **foreign key** on **SNUM** column of **CUSTOMERS** table referencing to the **primary key SNUM** of **SALESPEOPLE** table.
- 4. Create **DEPT** table with deptno as Primary Key.
- 5. Create **EMP** table with empno as Primary Key. Ensure that mgr is foreign key for EMP(empno) and deptno as foreign key for DEPT table primary key. If dept is deleted, all its employees should be auto deleted. If deptno of any dept is modified, corresponding rows of EMP should be auto modified.
- * Take data from DEPT & EMP from classwork-db.sql file.