**Session 4: Retrieve data using Query**

21. How many types of language are there in the database?

Answer – Three are two types of languages –

DDL (Data definition language) – Data definition language is used to design and modify the structure of a database.  
Common DDL commands are  
a. Create – This command is used to create database  
b. Alter – This command is used to modify the database.  
c. Drop – This command is used to delete database tables.

DML (Data manipulation language) – Data manipulation language provides commands for manipulating data in databases.

Common DML commands are  
a. Select – This command is used to display information from the database.  
b. Insert – This command is used to insert new records in the database.  
c. Delete – This command is used to delete records from the database.  
d. Update – This command is used to modify records in the database.

**22. Name DML commands.**

**Answer –** Data manipulation language (DML) access and manipulate data in existing tables.  
Name of DML commands –  
a. Select  
b. Insert  
c. Update  
d. Delete

**23. What is the purpose of using queries?**

**Answer –** Queries are commands that describe the data structure as well as manipulate the data in the database. The purpose of a query is to do calculations, integrate data from many tables, and add, alter, or delete data from a database.

**24. Which clause of Select statement helps to display specific data?**

**Answer –** Where clause is used to display specific data from the database.

**25. Differentiate between Where clause and Orderby clause of SQL statements.**

**Answer –** Where clause is used to display specific data from the database and Orderby used to display data in ascending order or descending order.

**26. State the purpose of Update Command with the help of an example.**

**Answer –** The update statement is used to modify records in the table. Example of update command is –

Update Student\_details

set Location = ‘Pune’

where Rollno = 10;

27. Consider the following table “Teachers”

| Rollno | Student\_Name | DOB | Address | Mobile\_no | Gender | Percentage |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Jugal | 10/01/2003 | Mumbai | 5555555555 | M | 98 |
| 2. | Pratigya | 24/03/2002 | Pune | 4444444444 | F | 82 |
| 3 | Sandeep | 12/12/2003 | Delhi | 8888888888 | M | 91 |
| 4 | Sangeeta | 01/07/2004 | Banglore | 6666666666 | F | 96 |
| 5 | Satti | 05/09/2002 | Mumbai | 7777777777 | M | 89 |

**Write SQL commands:**  
**a. To display all the information from the table whose address is ‘Mumbai’.**

**Answer –** Select \* from students where address = “Mumbai”;

**b. To list the details of all the students whose percentage is between 90 to 100.**

**Answer –** Select \* from students where percentage >= 90 and percentage <= 100;

**c. To display the name of all the students whose gender is Female.**

**Answer –** Select Subject from students where Gender = ‘F’;

**d. To display the list of names of all the students in alphabetical order.**

**Answer –** Select \* from students order by Student\_name;

**29. Write the SQL commands to answer the queries based on Fabric table**

|  |  |  |  |
| --- | --- | --- | --- |
| FabricID | Fname | Type | Disc |
| F001 | Shirt | Woolen | 10 |
| F002 | Suit | Cotton | 20 |
| F003 | Tunic | Cotton | 10 |
| F004 | Jeans | Denim | 5 |

a. Write a query for insert the following record  
(“F005”, “Kurta”, “Woollen”,5)

Answer – insert into Fabric values (‘F005’, ‘Kurta’, ‘Woolen’,5);

b. Write a query to display only those fabric whose disc is more than 10

Answer – select \* from Fabric where Disc>10;

c. To display those record whose type is ‘Woolen’

Answer – select \* from Fabric where type = ‘Woolen’;

d. To modify the fabric shirt by increasing discount by 10

Answer – update fabric set Disc = Disc + 10 where Fname = ‘Shirt’;

e. To delete the record of fabric F003 from table

Answer – delete from Fabric where FabricID =‘F003’;

**30. Consider the following Vendor table and write the queries**

| **VendorID** | **VName** | **DateofRegistration** | **Location** |
| --- | --- | --- | --- |
| **V001** | **Mother Dairy** | **20-01-2009** | **Delhi** |
| V002 | Havmor | 01-04-2015 | Gujrat |
| V003 | Amul | 12-05-2012 | Kolkata |
| V004 | Kwality Walls | 15-10-2013 | Mumbai |

a. Write a Query to display all records

Answer – Select \* from Vendor;

b. Write a Query to add a new row with the following details  
(„V005‟, „Vadilal‟, „2010-03-20‟, „Pune‟)

Answer – Insert into Vendor values (“V005‟, “Vadilal‟, “2010-03-20‟, “Pune‟);

c. Write a query to modify the location of V003 from Kolkata to Gujrat

Answer – Update Vendor Set location= “Gujrat‟ Where location= “Kolkata‟;

**31. Consider the following table “ITEM”:**

|  |  |  |  |
| --- | --- | --- | --- |
| Itemno | Iname | Price | Quantity |
| 11 | Soap | 40 | 80 |
| 22 | Powder | 80 | 30 |
| 33 | Face cream | 250 | 25 |
| 44 | Shampoo | 120 | 100 |
| 55 | Soap box | 20 | 50 |

a. Display the total amount of each item. The amount must be calculated as the price multiplied by quantity for each item.

Answer – Select price \* quantity from item;

b. Display the details of items whose price is less than 50.

Answer – Select \* from item where price < 50;

**32. Identify the columns and data types of a table: Airlines. Mention at least four columns with data type.**

Answer –  
Columns                Data type

Flight No               Text  
No.of Passengers  Integer  
Airlines                  Text  
Arrival\_Time          Date/Time  
Departure\_Time    Date/Time  
Fares                      Float

**33. Identify the columns and data types of a table: Students. Mention at least four columns with data type.**

Answer –  
**Columns**              **Data type**

RollNo                 **Integer**  
Student\_name     **Varchar(20)**  
Father\_name       **Varchar(20)**  
Mother\_name     **Varchar(20)**  
Address               **Varchar(50)**  
DOB                   **Date**