Ex no: 2	Basic SQL commands
Date	09-01-2024

AIM:

To implement and executed basic DML commands in SQL.

DESCRIPTION:

SQL (Structured Query Language) may be an effective language utilized to communicate with databases. It is used to make, adjust, and oversee information stored in relational databases. It can be used to query, insert, upgrade, and erase records from the database, as well as create and adjust the structure of the database itself. It could be a very versatile dialect and can be utilized to perform complex queries and control huge amounts of information. SQL is the foremost commonly utilized language for databases and is utilized in a wide assortment of program applications.

SELECT DML Command

SELECT is the most important data manipulation command in Structured Query Language. The SELECT command shows the records of the specified table. It also shows the particular record of a particular column by using the WHERE clause.

Syntax of SELECT DML command

SELECT column_Name_1, column_Name_2, ….., column_Name_N FROM Name_of_table;

INSERT DML Command

INSERT is another most important data manipulation command in Structured Query Language, which allows users to insert data in database tables.

Syntax of INSERT Command

INSERT INTO TABLE_NAME (column_Name1 , column_Name2 , column_Name3 , ... colu
mn_NameN) VALUES (value_

UPDATE DML Command

UPDATE is another important data manipulation command in Structured Query Language, which allows users to update or modify the existing data in database tables.

Syntax of UPDATE Command

UPDATE Table_name SET [column_name1= value_1, ….., column_nameN = value_N] WHER
E CONDITION;

DELETE DML Command

DELETE is a DML command that allows SQL users to remove single or multiple existing records from the database tables.

This command of Data Manipulation Language does not delete the stored data permanently from the database. We use the WHERE clause with the DELETE command to select specific rows from the table.

Syntax of DELETE Command

DELETE FROM Table_Name WHERE condition;

QUERIES AND OUTPUT SCREENSHOT:

User Table:

UserID	Name	Email	Password	Phone
1	John Smith	john.smith@example.com	password1	12345678901
2	Jane Doe	jane.doe@example.com	p@ssw0rd	98765432101
3	Michael Lee	michael.lee@example.com	12345678	44332211000
4	Sarah Adams	sarah.adams@example.com	sAdams123	11223344556
5	David Wang	david.wang@example.com	dWang2023	65432109876
6	Emily Chen	emily.chen@example.com	chen123	91827364560

7	Alex Kim	alex.kim@example.com	kimAlex22	55566677788
8	Lisa Lopez	lisa.lopez@example.com	lisa123	99900011122

Event Table:

EventID	Name	Date	Time	VenueID	Description
1	Concert in Park	15-08-2023	18:00	101	Enjoy a live concert in the city park.
2	Movie Night	20-08-2023	20:30	102	Movie night under the stars.
3	Sports Tournament	05-09-2023	14:00	103	Join us for an exciting sports tournament.
4	Art Exhibition	10-09-2023	12:00	104	Explore various artworks by local artists.
5	Food Festival	25-09-2023	11:00	105	A celebration of diverse cuisines.
6	Comedy Show	01-10-2023	19:30	106	Laugh your heart out at our comedy show.
7	Tech Conference	15-10-2023	09:00	107	Join tech experts for informative sessions.
8	Dance Workshop	05-11-2023	16:00	108	Learn various dance styles in this workshop.

Venue Table:

Venue ID	Name	Address	City	State	Country
101	City Park	123 Park Street	New York	NY	USA
102	Open Field	456 Meadow Lane	Los Angeles	CA	USA
103	Sports Arena	789 Stadium Road	Chicago	IL	USA
104	Art Gallery	101 Art Avenue	San Francisco	CA	USA
105	Event Center	555 Celebration Boulevard	Miami	FL	USA
106	Comedy Club	777 Laughter Street	Houston	TX	USA
107	Convention Center	999 Tech Avenue	Seattle	WA	USA
108	Dance Studio	222 Rhythm Road	Boston	MA	USA

Ticket table:

TicketID	EventID	UserID	SeatNumber	Price	Status
1	1	1	A1	25	Booked
2	1	2	B2	25	Booked
3	2	3	C3	15	Booked
4	2	4	D4	15	Booked
5	3	5	A2	10	Booked
6	3	6	B3	10	Booked
7	4	7	C4	8.5	Booked
8	4	8	D5	8.5	Booked

1. Retrieve the details of users whose names contain "Smith."

```
SQL> SELECT * FROM User_URK22AI1048 WHERE Name LIKE '%Smith%';

    USERID NAME
---------- --------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------
EMAIL
--------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------
PASSWORD
                                                                    PHONE
--------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------ --------------------
         1 John Smith
john.smith@example.com
password1
                                                                    12345678901
```

2. Display the details of users whose passwords are not equal to "password1."

```
SQL> SELECT * FROM User_URK22AI1048 WHERE Password != 'password1';

    USERID NAME
---------- --------------------------------------------------------------------------------
--------------------------------------------------------------------
EMAIL
--------------------------------------------------------------------------------------------
------------------------------------------------------------
PASSWORD
                                                                   PHONE
--------------------------------------------------------------------------------------------
------------------------------------------------------------ --------------------
         2 Jane Doe
jane.doe@example.com
p@ssw0rd
                                                                   98765432101

         3 Michael Lee
michael.lee@example.com
12345678
                                                                   44332211000

         4 Sarah Adams
sarah.adams@example.com
sAdams123
                                                                   11223344556

         5 David Wang
david.wang@example.com
dWang2023
                                                                   65432109876

         6 Emily Chen
emily.chen@example.com
chen123
                                                                   91827364560

         7 Alex Kim
alex.kim@example.com
kimAlex22
                                                                   55566677788

         8 Lisa Lopez
lisa.lopez@example.com
lisa123
                                                                   99900011122
```

3. Display the details of users whose email addresses end with "@example.com" and have a phone number starting with "+9876."

```
SQL> SELECT * FROM User_URK22AI1048 WHERE Email LIKE '%@example.com' AND Phone LIKE '9876%';

    USERID NAME
---------- ------------------------------------------------------------------------------------------
------------------------------------------------------------------
EMAIL
------------------------------------------------------------------------------------------------------
------------------------------------------------------------
PASSWORD
                                                                   PHONE
------------------------------------------------------------------------------------------------------
------------------------------------------------------------ --------------------
         2 Jane Doe
jane.doe@example.com
p@ssw0rd
                                                                   98765432101

SQL>
```

4. Display the details of users whose UserID is either 2, 4, or 6.

```
SQL> SELECT * FROM User_URK22AI1048 WHERE UserID IN (2, 4, 6);

    USERID NAME
---------- ------------------------------------------------------------------------------------------
------------------------------------------------------------------
EMAIL
------------------------------------------------------------------------------------------------------
------------------------------------------------------------
PASSWORD
                                                                   PHONE
------------------------------------------------------------------------------------------------------
------------------------------------------------------------ --------------------
         2 Jane Doe
jane.doe@example.com
p@ssw0rd
                                                                   98765432101

         4 Sarah Adams
sarah.adams@example.com
sAdams123
                                                                   11223344556

         6 Emily Chen
emily.chen@example.com
chen123
                                                                   91827364560
```

5. Retrieve the details of events that are scheduled to take place after September 15, 2023.

```
SQL> SELECT * FROM Event_URK22AI1048 WHERE EVENTDate > '15-SEP-2023';

   EVENTID NAME
                                                                    EVENTDATE
---------- ------------------------------------------------------------------------------------
---------------------------------------------------------------- ---------
TIME
                                                              VENUEID
------------------------------------------------------------------------------------------------
---------------------------------------------------------- ----------
DESCRIPTION
------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
         5 Food Festival
                                                                    25-SEP-23
11:00
                                                                   105
A celebration of diverse cuisines.

         6 Comedy Show
                                                                    01-OCT-23
19:30
                                                                   106
Laugh your heart out at our comedy show.

         7 Tech Conference
                                                                    15-OCT-23
09:00
                                                                   107
Join tech experts for informative sessions.

         8 Dance Workshop
                                                                    05-NOV-23
16:00
                                                                   108
Learn various dance styles in this workshop.
```

6. Retrieve the details of events that are scheduled to take place after September 10, 2023, and have a VenueID greater than 105.

```
SQL> SELECT * FROM Event_URK22AI1048 WHERE EVENTDate > '10-SEP-2023' AND VenueID > 105;

   EVENTID NAME
                                                                    EVENTDATE
---------- ------------------------------------------------------------------------------------
------------------------------------------------------------------ ---------
TIME
                                                                  VENUEID
------------------------------------------------------------------------------------------------
---------------------------------------------------------- ----------
DESCRIPTION
------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
         6 Comedy Show
                                                                        01-OCT-23
19:30
                                                                       106
Laugh your heart out at our comedy show.

         7 Tech Conference
                                                                        15-OCT-23
09:00
                                                                       107
Join tech experts for informative sessions.

         8 Dance Workshop
                                                                        05-NOV-23
16:00
                                                                       108
Learn various dance styles in this workshop.
```

7. Retrieve the details of events that have a name containing "Concert" or "Show" in their name.

```
SQL>  SELECT * FROM Event_URK22AI1048 WHERE Name LIKE '%Concert%' OR Name LIKE '%Show%';

   EVENTID NAME
                                                                    EVENTDATE
---------- ------------------------------------------------------------------------------------
------------------------------------------------------------------ ---------
TIME
                                                                  VENUEID
------------------------------------------------------------------------------------------------
---------------------------------------------------------- ----------
DESCRIPTION
------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
         1 Concert in Park
                                                                        15-AUG-23
18:00
                                                                       101
Enjoy a live concert in the city park.

         6 Comedy Show
                                                                        01-OCT-23
19:30
                                                                       106
Laugh your heart out at our comedy show.
```

8. Increase the ticket prices for all booked tickets by 5 units.

```
SQL> UPDATE Ticket_URK22AI1048 SET Price = Price + 5 WHERE Status = 'Booked';
SQL> SELECT * FROM TICKET_URK22AI1048;

  TICKETID    EVENTID     USERID SEATNUMBER                PRICE STATUS
---------- ---------- ---------- -------------------- ---------- ---------------
         1          1          1 A1                           30 Booked
         2          1          2 B2                           30 Booked
         3          2          3 C3                           20 Booked
         4          2          4 D4                           20 Booked
         5          3          5 A2                           15 Booked
         6          3          6 B3                           15 Booked
         7          4          7 C4                         13.5 Booked
         8          4          8 D5                         13.5 Booked
```

9. Reduce the ticket prices for EventID 2 by 10 units.

```
SQL> UPDATE Ticket_URK22AI1048 SET Price = Price - 10 WHERE EventID = 2;
SQL> SELECT * FROM TICKET_URK22AI1048;

  TICKETID    EVENTID     USERID SEATNUMBER                PRICE STATUS
---------- ---------- ---------- -------------------- ---------- ----------
         1          1          1 A1                           30 Booked
         2          1          2 B2                           30 Booked
         3          2          3 C3                           10 Booked
         4          2          4 D4                           10 Booked
         5          3          5 A2                           15 Booked
         6          3          6 B3                           15 Booked
         7          4          7 C4                         13.5 Booked
         8          4          8 D5                         13.5 Booked
SQL>
```

10. Double the ticket prices for tickets with a status of "Booked" and an EventID of 1.

```
SQL> UPDATE Ticket_URK22AI1048 SET Price = Price * 2 WHERE Status = 'Booked' AND EventID = 1;
SQL> SELECT * FROM TICKET_URK22AI1048;

  TICKETID    EVENTID     USERID SEATNUMBER                PRICE STATUS
---------- ---------- ---------- -------------------- ---------- ---------------
         1          1          1 A1                           60 Booked
         2          1          2 B2                           60 Booked
         3          2          3 C3                           10 Booked
         4          2          4 D4                           10 Booked
         5          3          5 A2                           15 Booked
         6          3          6 B3                           15 Booked
         7          4          7 C4                         13.5 Booked
         8          4          8 D5                         13.5 Booked
SQL>
```

11. Increase the ticket prices for tickets with a status of "Booked" and a price less than 20 by 5 units.

```
SQL>  UPDATE Ticket_URK22AI1048 SET Price = Price + 5 WHERE Status = 'Booked' AND Price < 20;
SQL> SELECT * FROM TICKET_URK22AI1048;

  TICKETID    EVENTID     USERID SEATNUMBER                PRICE STATUS
---------- ---------- ---------- -------------------- ---------- --------------------------------
         1          1          1 A1                           60 Booked
         2          1          2 B2                           60 Booked
         3          2          3 C3                           15 Booked
         4          2          4 D4                           15 Booked
         5          3          5 A2                           20 Booked
         6          3          6 B3                           20 Booked
         7          4          7 C4                         18.5 Booked
         8          4          8 D5                         18.5 Booked
SQL>
```

12. Increase the VenueID for EventID 3 to 110.

```
         8          4          8 D5                          18.5 Booked
SQL> UPDATE Event_URK22AI1048 SET VenueID = 110 WHERE EventID = 3;
SQL> SELECT * FROM EVENT_URK22AI1048;

   EVENTID NAME
                                                                    EVENTDATE
---------- ------------------------------------------------------------------------------
------------------------------------------------------------------ ---------
TIME
                                                                 VENUEID
------------------------------------------------------------------------------------------
---------------------------------------------------------- ----------
DESCRIPTION
------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
         1 Concert in Park
                                                                    15-AUG-23
18:00
                                                                 101
Enjoy a live concert in the city park.

         2 Movie Night
                                                                    20-AUG-23
20:30
                                                                 102
Movie night under the stars.

         3 Sports Tournament
                                                                    05-SEP-23
14:00
                                                                 110
Join us for an exciting sports tournament.

         4 Art Exhibition
                                                                    10-AUG-23
12:00
                                                                 104
Explore various artworks by local artists.

         5 Food Festival
                                                                    25-SEP-23
11:00
                                                                 105
A celebration of diverse cuisines.

         6 Comedy Show
                                                                    01-OCT-23
19:30
```

13. Retrieve the details of events that are scheduled to take place on or after 20-09-2023.

```
SQL> SELECT * FROM Event_URK22AI1048 WHERE EVENTDate >= '20-SEP-2023';

   EVENTID NAME
                                                                    EVENTDATE
---------- ------------------------------------------------------------------------------
------------------------------------------------------------------- ---------
TIME
                                                                 VENUEID
------------------------------------------------------------------------------------------
---------------------------------------------------------- ----------
DESCRIPTION
------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
         5 Food Festival
                                                                    25-SEP-23
11:00
                                                                       105
A celebration of diverse cuisines.

         6 Comedy Show
                                                                    01-OCT-23
19:30
                                                                       106
Laugh your heart out at our comedy show.

         7 Tech Conference
                                                                    15-OCT-23
09:00
                                                                       107
Join tech experts for informative sessions.

         8 Dance Workshop
                                                                    05-NOV-23
16:00
                                                                       108
Learn various dance styles in this workshop.
```

14. Delete the event with EventID 2.

```
SQL> DELETE FROM Event_URK22AI1048 WHERE NAME LIKE '%SHOW';
SQL> SELECT*FROM EVENT_URK22AI1048;

   EVENTID NAME
                                                                    EVENTDATE
---------- ---------------------------------------------------------------------------
---------------------------------------------------------------- ---------
TIME
                                                          VENUEID
---------------------------------------------------------------------------------------
---------------------------------------------------------- ----------
DESCRIPTION
---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
         1 Concert in Park
                                                                    15-AUG-23
18:00
                                                                  101
Enjoy a live concert in the city park.

         2 Movie Night
                                                                    20-AUG-23
20:30
                                                                  102
Movie night under the stars.

         3 Sports Tournament
                                                                    05-SEP-23
14:00
                                                                  110
Join us for an exciting sports tournament.

         4 Art Exhibition
                                                                    10-AUG-23
12:00
                                                                  104
Explore various artworks by local artists.

         5 Food Festival
                                                                    25-SEP-23
11:00
                                                                  105
```

15. Display the details of events that have a description containing the word "workshop."

```
SQL> SELECT * FROM Event_URK22AI1048 WHERE Description LIKE '%workshop%';

   EVENTID NAME
                                                                                EVENTDATE
---------- ------------------------------------------------------------------------------------
------------------------------------------------------------------ ---------
TIME
                                                                  VENUEID
------------------------------------------------------------------------------------------------
------------------------------------------------------------ ----------
DESCRIPTION
------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
         8 Dance Workshop
                                                                            05-NOV-23
16:00
                                                                         108
Learn various dance styles in this workshop.
```

RESULT:

The tables were created and DDL commands were executed successfully.