20CS2016L - Database Systems Lab

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\ ,\\ column_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
	John	john.smith@example.co		1234567890
1	Smith	m	password1	1
				9876543210
2	Jane Doe	jane.doe@example.com	p@ssw0rd	1
	Michael	michael.lee@example.co		4433221100
3	Lee	m	12345678	0
	Sarah	sarah.adams@example.c		1122334455
4	Adams	om	sAdams123	6
	David	david.wang@example.co		6543210987
5	Wang	m	dWang2023	6
	Emily	emily.chen@example.co		9182736456
6	Chen	m	chen123	0

				5556667778
7	Alex Kim	alex.kim@example.com	kimAlex22	8
				9990001112
8	Lisa Lopez	lisa.lopez@example.com	lisa123	2

Event Table:

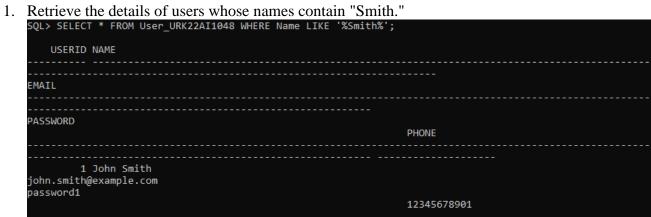
EventID	Name	Date	Time	VenueID	Description
	Concert in	15-08-			Enjoy a live concert in the city
1	Park	2023	18:00	101	park.
	Movie	20-08-			
2	Night	2023	20:30	102	Movie night under the stars.
	Sports	05-09-			Join us for an exciting sports
3	Tournament	2023	14:00	103	tournament.
	Art	10-09-			Explore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

Venue Table:

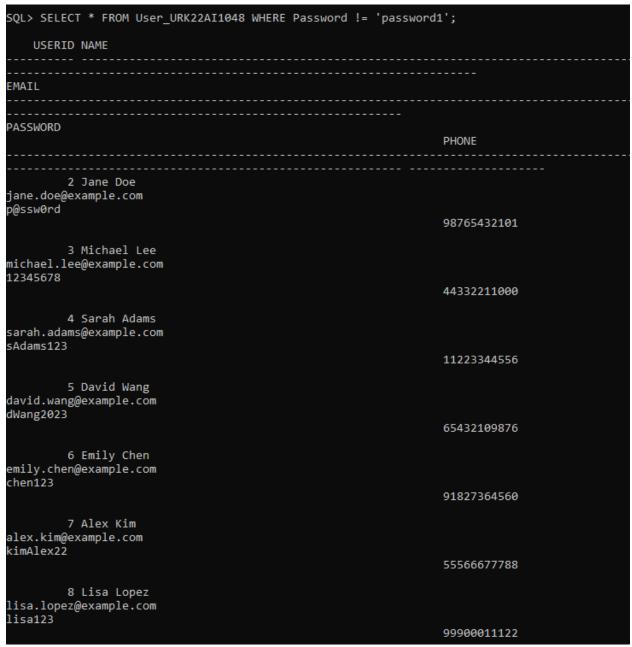
Venue					
ID	Name	Address	City	State	Country
101	City Park	123 Park Street	New York	NY	USA
102	Open Field	456 Meadow Lane	Los Angeles	CA	USA
103	Sports Arena	789 Stadium Road	Chicago	${ m IL}$	USA
104	Art Gallery	101 Art Avenue	San Francisco	CA	USA
		555 Celebration			
105	Event Center	Boulevard	Miami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

Ticket table:

TicketI	EventI		SeatNumb		
D	D	UserID	er	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	В3	10	Booked
7	4	7	C4	8.5	Booked
8	4	8	D5	8.5	Booked



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



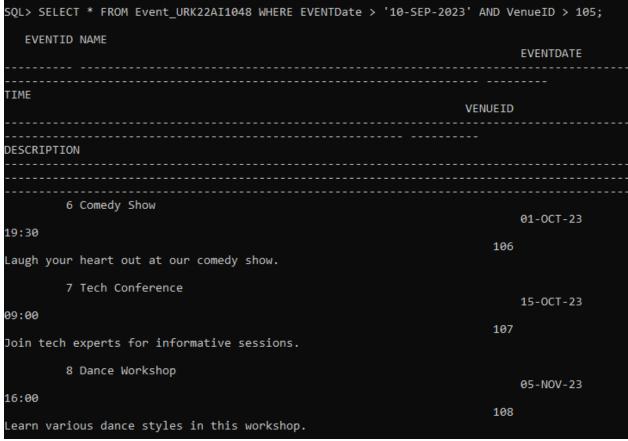
3. Display the details of users whose email addresses end with "@example.com" and have a phone number starting with "+9876."

SQL> SELECT * FROM User_URK22AI1048 WHERE Email LIKE '%@example.com' AND Phot	ne LIKE '9876%';
USERID NAME	
EMAIL	
PASSWORD PHONE	
2 Jane Doe jane.doe@example.com	
p@ssw0rd 98765432101	
4. Display the details of users whose UserID is either 2, 4, or 6.	
4. Display the details of users whose Oserib is either 2, 4, of 6.	
SQL> SELECT * FROM User_URK22AI1048 WHERE UserID IN (2, 4, 6)	;
USERID NAME	
EMAIL	
PASSWORD	BUONE
	PHONE
2 Jane Doe jane.doe@example.com	
p@ssw0rd	00765433404
	98765432101
4 Sarah Adams	
sarah.adams@example.com sAdams123	
SAUdiii5123	11223344556
C Fuilly Chan	
6 Emily Chen emily.chen@example.com	
chen123	
	91827364560
	1 15 2022

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 VENU	EID
DESCRIPTION	
5 Food Festival 11:00	25-SEP-23
A celebration of diverse cuisines.	105
6 Comedy Show	01-0CT-23
19:30	106
Laugh your heart out at our comedy show.	
7 Tech Conference 09:00	15-0CT-23
Join tech experts for informative sessions.	107
8 Dance Workshop	05-NOV-23
16:00 Learn various dance styles in this workshop.	95-NOV-23 108

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



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

1 Concert in Park

15-AUG-23

18:00

Enjoy a live concert in the city park.

6 Comedy Show

01-OCT-23

19:30

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	EVENIID	OSEKID SE	EAINUMBEK	PRICE	STATUS
1	1	1 A1	1	30	Booked
2	1	2 B2	2	30	Booked
3	2	3 C3	3	20	Booked
4	2	4 D4	4	20	Booked
5	3	5 A2	2	15	Booked
6	3	6 B3	3	15	Booked
7	4	7 C4	4	13.5	Booked
8	4	8 DS	5	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		B2		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 A1
                                                                      60 Booked
                                  2 B2
3 C3
                                                                      60 Booked
                                                                      15 Booked
                                                                      15 Booked
                                  4 D4
                                  5 A2
                                                                      20 Booked
                                   6 B3
                                                                      20 Booked
                                                                    18.5 Booked
                                   8 D5
          8
                                                                    18.5 Booked
```

12. Increase the VenueID for EventID 3 to 110.

8 4 8 D5 18.5 BOOKE SQL> UPDATE Event_URK22AI1048 SET VenueID = 110 WHERE EventID = 3; SQL> SELECT * FROM EVENT_URK22AI1048;	ea	
EVENTID NAME		EVENTDATE
TIME VEN	NUEID	
DESCRIPTION		
1 Concert in Park		
18:00 Enjoy a live concert in the city park.	101	
2 Movie Night 20:30		20-AUG-23
Movie night under the stars.	102	
3 Sports Tournament 14:00	110	05-SEP-23
Join us for an exciting sports tournament. 4 Art Exhibition	110	
12:00	104	10-AUG-23
Explore various artworks by local artists. 5 Food Festival		25-SEP-23
11:00 A celebration of diverse cuisines.	105	
6 Comedy Show		01-OCT-23

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
                                                                            01-0CT-23
19:30
                                                                        106
Laugh your heart out at our comedy show.
         7 Tech Conference
                                                                            15-0CT-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
Enjoy a live concert in the city park.	101
2 Movie Night	20-AUG-23
Movie night under the stars.	102
3 Sports Tournament 14:00	05-SEP-23
Join us for an exciting sports tournament.	110
4 Art Exhibition 12:00	10-AUG-23
Explore various artworks by local artists.	104
5 Food Festival 11:00	25-SEP-23
	105

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

SQL> SELECT * FROM Event_URK22AI1048 WHERE Description LIKE '%	śworkshop%';
EVENTID NAME	EVENTDATE
TIME	VENUEID
DESCRIPTION	
A Description	
8 Dance Workshop 16:00	05-NOV-23
Learn various dance styles in this workshop.	108

RESULT:

The tables were created and DDL commands were executed successfully.