

Task no: 2.1 Generating design of others Traditional Database
Date:- 5-8-25 model.

Aim:- Implementation of DDL and DML Commands of SQL with suitable examples.

DDL Commands:- (Data Definition Language)

Definition:- DDL Commands are used to define, modify, or delete the structure of database objects such as table.

1. Create table:-

Definition: used to create a new table in the database

Query:-

SQl:

Create table student teacher (tech-id, tech-name varchar(10), tech-ph-no varchar(10));

Output:

Table created

2. Describe or desc

Definition: Displays the structure of a table (column names and datatypes):

Query:-

SQl

DESC teacher

Output:-

Name	Type
tech-ID	number(38)
Tech-NAME	VARCHAR2(10)
Tech-PH-NO	VARCHAR2(10)

3. Drop table:-

definition:- delete the entire table structure and all its data.

Query:-

SQL

Drop Table teacher;

Output:-

Table teacher dropped successfully.

i. ALTER Table

Definition:- used to add, delete, or modify columns in an existing table.

Query:-

SQL

Alter table teacher add salary int;

Output:-

Table altered.

Name	Type
Tech-ID	Number(38)
Tech-NAME	VARCHAR2(10)
Tech-PH-NO	VARCHAR2(10)
Salary	Number(38)

DML Commands:- (Data Manipulation Language)

Definition: DML Commands are used to manage and manipulate data inside database tables.

1. Insert into

Definition: Inserts new rows into table.

Query:-

```
Sql> insert into teacher values(101, 'vinay', 1234567891,  
2000);  
1 row created
```

```
Sql> insert into teacher values (102, 'vijay', 345688734,  
89000);  
1 row created
```

```
Sql> insert into teacher values (103, 'ramya', 456789999, 25888)  
1 row created
```

Output:-

3 rows created

2. select :-

Definition: Retrieves data from one or more tables.

Query:-

```
Sql>
```

```
Select * from teacher;
```

Output:-

Tech-ID	Tech-NAME	Tech-PH-NO	Salary
101	Vinay	1234567891	20000
102	Vijay	345688734	89000
103	ramya	456789999	25888

3. Update

Definition:- modifies existing data in a table

Query:-

Sq/1

update teacher set tech-name = 'madhuri' where
tech-id = 103;

Output:-

1 row update

After update

Tech-ID	Tech-NAME	TECH-PH-NO	Salary
101	Vinay	1234567891	20000
102	Vijay	356887345	89000
103	madhuri	456789999	25888

4. Delete

Definition : Deletes one or more rows from a table

Query:-

Sq/1

Delete from teacher where tech-id = 2;

Output:

2 row Deleted

After deleted.

Tech-ID	Tech-NAME	Tech-ph-no	Salary
101	Vinay	1234567891	20000
103	Madhuri	456789999	25888

5. Select with

question asked

Definition:- Retrieves specific records that satisfy the condition.

Query:-

SQL :-

Select * from teacher where tech-ph-no = '1234567891'.

Output:-

Tech-ID	Tech-name	Tech-ph-no	Salary
101	Vinay	1234567891	20000

SRN	Student Name	Branch	Gender
101	ACCPD1001	IT	Male
102	ACCPD1002	IT	Female
103	ACCPD1003	IT	Male
104	ACCPD1004	IT	Female

VEL TECH	
EX NO.	01-01-2023
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	—
TOTAL (20)	15
STAR WITH DATE	15/12/2023

DQL and DML

Result:- The task to run DQL and DML Commands executed successfully.

desc customer;

Name	Type
Customer ID	number(38)
Name	varchar(100)
Address	varchar(200)

desc customercredit card;

Name	Type
CreditCard number	varchar(20)
Expiry Date	Date
Customer ID	number(38)

desc Branch;

Name	Type
Branch ID	number(38)
Branch name	varchar(200)
Location	varchar(200)
Ifsc code	varchar(20)

desc Bankerinfo

Name	Type
Banker ID	number(38)
Banker Name	varchar(100)
Banker Email	varchar(100)
Branch ID	number(38)

Wichtig: Diese Tabelle muss direkt mit der Tabelle Branch verknüpft werden.

LSK NO :- 2.2

Date: 12-8-25

DDL AND DML Commands with Constraints

Aim:- Implementation of DDL and DML Commands with Constraints

DDL Commands

1.1 Create table

Definition: used to create a new table in the database.

Query:-

Sq1

Create table Customer (

Customer ID INT primary key,

Name VARCHAR(100) NOT NULL,

Address VARCHAR(200),

);

Create table customer creditcard (

creditcardnumber VARCHAR(20) primary key,

expiry_date DATE NOT NULL,

FOREIGN KEY (Customer ID) REFERENCES customer (Customer ID);

Create table Branch (

Branch ID INT PRIMARY key,

branch Name VARCHAR(100) NOT NULL,

location VARCHAR(100),

ifsc_code VARCHAR(20) UNIQUE

);

Create table Bankerinfos (

bankerID INT PRIMARY key,

bankerName VARCHAR(100) NOT NULL,

banker_email VARCHAR(100) UNIQUE

FOREIGN KEY (branch ID) REFERENCES Branch (BranchID);

);

Name	Type
Loan-number	Number(38)
Amount	Number(38)
Customer ID	Number(38)
Branch ID	Number(38)

Name	Type
Account-number	Number(38)
Balance	Number(38)
Category	Varchar2(50)
Customer ID	Number(38)
Branch ID	Number(38)

1.2 desc customer;

Name	NULL	Type
Customer ID	Not Null	Number(38)
Name	Not Null	Varchar2(100)
Address	Not Null	Varchar2(100)
Ph-no	Not Null	Varchar2(100)

1.4 Rename Table

Table renamed

Insert Customer

customer ID	Name	Address	ph-no
238	Ram	Chennai	834567891

Insert - Credit card number

CreditCard number	expiry-date	Customer-ID
832992586284	12-mar-2030	238

Create table loan ()
 loan number INT PRIMARY KEY,
 amount INT,
 FOREIGN KEY (customer ID) REFERENCES customer (customer ID),
 FOREIGN KEY (branch ID) REFERENCES Branch (branch ID);

Create table Account ()
 account number INT PRIMARY KEY
 balance INT,
 Category VARCHAR (50)
 FOREIGN KEY (customer ID) REFERENCES customer (customer ID),
 FOREIGN KEY (branch ID) REFERENCES Branch (branch ID);

1.2 Alter Table

Alter Table Customer add ph-no VARCHAR (10);

1.3 Truncate Table:

Truncate table loan

Result:- All rows are removed from loan table, Structure remains

1.4 Rename Table:

Rename Table Customer to Customer;

2. DML Commands

2.1 Insert data:

insert into Customers (customer ID, name, address, Ph-no)
 values (238, 'Ram', 'Chennai', '834567891');

insert into Customer credit card (credit card number,
 expiry-data)

values ('8329 9528 6234', 12-MAR-2030);

Branch_ID

BranchID	branchName	Location	ifsc_code
4590	Chennai branch	Chennai	8925459081

(Insert-Bankerinfo)

BankerID	BankerName	bankeremail	BranchID
7896	Chandu	Chandu@gmail.com	4590

Insert loan

loan_number	amount	Customer-ID	Branch_ID
8996	50000	238	4590

Insert-account number

account number	Balance	Category
5985423108	10000.	Savings

After Update in the table:-

Customer-ID	Name	Address	ph-no
238	Vinay	Chennai	783456789

After deleting the table:-

Banker ID	Banker Name	bankeremail	Branch ID
7897	nandhu	nandhu72@gmail.com	4590

```
insert into Branch(branchID, branchName, location, ifsc_code)
values (4590, 'Chennai branch', 'Chennai', '8925 4596 031');

insert into BankerInfo(brankerID, bankerName, bankerEmail)
Values (7896, 'Chandu', 'Chandu11@gmail.com'), (7897,
insert into loan (loan number, amount)
Values (8996, 50000);

insert into Account (account number, balance, category)
Values (5985423108, 100000, 'Savings');
```

2.2 Update Data:

Update customer set name = 'vinay' where customerID = 238;
Result:- Name is updated to vinay

2.3 Delete data:

Delete data from BankerInfo where bankerID = 7896;

2.4 Select data:

Select name, ph-no from customers;

Name	ph-no
Ram	83456789

Result:- The implementation of DDL and DML commands with constraints are executed successfully

VEL TECH	
EX NO.	2.1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	4
RECORD (5)	14
TOTAL (20)	34

M
12/8/15