

Task no: 2 Generating Design of other traditional
Date: 05/08/25 Database model.

Aim: Implementation of DDL commands of SQL with suitable example.

1. DDL Commands (Data definition languages)

Def: DDL Commands are used to define, modify, or delete the structure of database Objects Such as tables.

1. Create table:

Def: used to create a new database.

Query:

SQL: create table employee (em_id int, em_name varchar(100), em_ph_no varchar(100));

output:

table created.

2. Describe or Desc.

Def: Display the structure of a table.

Query:

SQL Desc employee;

output:

<u>Name</u>	<u>Type</u>
em_id	Number(32)
em_name	VARCHAR2(100)
em_ph_no	VARCHAR2(100)

3. Drop table.

Def: Delete the entire table structure and all its data.

Query:

SQL Drop table employee;

output:

Table dropped.

4. Alter table.

Def: used to add, delete or modify column in an existing table.

Query:

SQL Alter table employee ADD Salary int;

output:

table altered.

11. DML commands (Data Manipulation language)

Def: DML commands are used to manage and manipulate data inside database tables.

1. Insert into.

Def: Insert new rows into table.

name	type
em_id	Number (38)
em-name	Varchar2 (100)
em-ph-no	Varchar2 (100)
salary	number (38)

Query:

SQL: Insert into employee values (101, 'Vinay',
'85836456');

Insert into employee values (102, 'Vijay',
'858377645');

Insert into employee values (103, 'Arun',
'858776326');

Output:

3 row created.

2. Select.

Def: Retrieve data from one or more table.

Query:

SQL

Select * from employee;

Output:

empId	em-Name	em-ph-no
101	Vinay	85836456
102	Vijay	858377645
103	Arun	858776326

3. update.

Def: Modifies existing data in a table.

Query:

SQL update employee set em-name = 'ram'
where em-id = 103;

output:

1 row updated.

After update:

SQL Select * from employee;

emp_id	em_Name	emp-ph-no
101	Vinay	85836456
102	Vijay	858377645
103	Ram	858776326

4. Delete .

Def : Deletes one or more rows from a table

Query:

SQL Delete from employee where em_id = 101;

output:

1 row deleted.

After delete.

SQL Select * from employee;

em_id	em_Name	em-ph-no
102	Vijay	858377645
103	Ram	858776326

5. Select with where clause.


Def: Retrieves specific records that satisfy the condition

Query:

SQL Select * from employee where em-name
= 'vijay';

Output:

em-id	em-name	em-ph-no
102	vijay	858377645

VEL TECH	
EX NO.	201
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
SIGN WITH DATE	 3/8/25

Result: The implementation of DDL and DML
commands are executed Successfully.

DDL and DML Commands with constraints

Task no: 2.1

Date: 12/08/25

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:

SQL

```
create table customer(
```

```
customer ID int Primary key,
```

```
name varchar(100) Not null,
```

```
address VARCHAR(200),
```

```
);
```

```
create table customerCreditCard(
```

```
CreditCard no VARCHAR(20) Primary key,
```

```
expiry_date DATE NOT NULL,
```

```
customer-ID int,
```

```
FOREIGN KEY(customer ID) REFERENCE 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
```

```
);
```


desc customer;

Name	NULL	Type
Customer ID	Not null	NUMBER(38)
Name	not null	VARCHAR2(100)
Address		VARCHAR2(200)

desc Customer credit card;

Name	Type	NULL
CREDIT CARD NUMBER	VARCHAR2(20)	NOT NULL
EXPIRY - DATE	DATE	NOT NULL
CUSTOMER ID	NUMBER(38)	

desc Branch;

Name	NULL	TYPE
BRANCH ID	NOT NULL	NUMBER(38)
BRANCHNAME	NOT NULL	VARCHAR2(100)
LOCATION		VARCHAR2(100)
IFSC_CODE		VARCHAR2(20)

Create table BankInfo(

bankerID INT PRIMARY KEY,
bankerName VARCHAR(100) NOT NULL,
bankerEmail VARCHAR(100) UNIQUE,
FOREIGN KEY(branch ID) REFERENCES Branch (Branch ID)
);

Create table loan (

loanNumber 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) REFERENCE customer
(customer ID),
FOREIGN KEY(Branch ID) REFERENCE 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.

desc Banker Info;

NAME	NULL	TYPE
BANKERID	NOT NULL	NUMBER (38)
BANKERNAME	NOT NULL	VARCHAR2 (100)
BANKER MAIL		VARCHAR2 (100)
BRANCHID		NUMBER (38)

desc loan;

NAME	NULL	TYPE
LOAN-NUMBER	NOT NULL	NUMBER (38)
AMOUNT		NUMBER (38)
CUSTOMER-ID		NUMBER (38)
BRANCH-ID		NUMBER (38)

desc Account

NAME	NULL	TYPE
ACCOUNT-NUMBER	NOT NULL	NUMBER (38)
BALANCE		NUMBER (38)
CATEGORY		VARCHAR2 (50)
CUSTOMER ID		VARCHAR2 (30)
BRANCH-ID.		NUMBER (38)

1.2 desc Customer

NAME	NULL	TYPE
CUSTOMER ID	NOT NULL	NUMBER (38)
NAME	NOT NULL	VARCHAR (100)
ADDRESS		VARCHAR2 (100)
PH-NO		VARCHAR2 (10)

1.4 Rename table

Rename table customer to customers

2. DML Commands

2.1 Insert data

Insert into customer (customer ID, name, address, ph-no)

Values (238, 'Ram', 'chennai', '83456789');

Insert into customercreditcard (creditcard number, Expiry date)

Values ('8329 9256 6234', '12-MAR-2039');

Insert into Branch (branch ID, branch name, location,

IFSC-code) values (4590, 'chennai branch', 'chennai', '8925 4596 6311');

Insert into Banker info (banker ID, banker name, banker email)

values (7896, 'chandu', 'chanduu1@gmail.com'); (7897, 'Nandhu', 'nandhu72@gmail.com');

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 customer ID = 238, Result: Name is updated to Vinay.

2.3 delete Data

Delete from banker info where banker ID = 7896;

1.4 . Rename table.

Table renamed.

Customer-ID	NAME	ADDRESS	Ph-no
238	Ram	Chennai	83456789

Creditcard number	Expiry date	Customer-ID
832929586234	12-MAR-2030	238

BranchID	BranchNAME	location	IFSC-code
45920	Chennai Branch	Chennai	8925459031

BankerID	bankername	BankerEmail	BranchID
7896	Chandu	Chandu.H@gmail.com	4590

loan number	amount	customer ID	BranchID
8996	50006	238	4590

Account number	Balance	Category
5985423108	10000	Savings

After updating the table:


CustomerID	NAME	ADDRESS	Ph-no
238	Vinay	Chennai	83456789

After deleting the table.

BankerID	Banker name	Banker_email	Branch ID
7897	nandhu	nandu72@gmail.com	4590

Select.

Name	Ph-no
Ram	83456789



2.4 Select data

Select name, ph-no from Customers;

VEL TECH	
EX NO.	21
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	25
TOTAL (20)	40

12/8/23

Result: The ~~task~~ ^{implementain.} to run DDL and DML commands with constraints ^{are} executed successfully.