TASK-2.1

GENERATING DESIGN OF OTHER TRADITION-AL DATABASE MODEL

AIM: - To generate design of other traditional database model and implement DDL commands of SQL with samples.

DATA DEFINITION LANGUAGE (DDL):

Definition: DDL Commands are used to define modify or delete the subructue of database objects such as tables.

1) Create Table:

Definition: Used to create a new table in database Query

```sql
CREATE TABLE Mobile phone (
Customer Id INT
Mobile VARCHAR (50),
Brand VARCHAR (30),
Amount INT
):
```

Table created

Output: Tables mobile phone and customer.

1) DESCRIBE or DESC

Definition: displays the structure of table (columns, names and datatypes)

Query:-
SQL
DESC mobile phone
OUTPUT:

ID	INT
MOBILE	VARCHAR (50)
BRAND	VARCHAR (30)
AMOUNT	INT

Drop Table: (Deletes the table)

Query:- DROP TABLE mobile phone
OUTPUT: Table mobile phone successfully deleted

Alter Table: (Adds Add in a table)

Query: => Alter table mobile phone ADD
modify model-NAME VARCHAR(100)

DML Queries:

* Insert into: (insert new rows in table)

Query:

→ INSERT INTO mobilephone (ID, Mobile, Brand, Amount) VALUES (1, 'Iphone', 'Apple', 1,00000);

OUTPUT:

1 row inserted to mobilephone

* SELECT: (Retrieves data from one or more tables)

Query:

SQL

SELECT * FROM Mobilephone

OUTPUT:

ID	Mobile	Brand	Amount
1	Realme	NU-90	80,000
2	Redmi	POCO	15,000
3	VIVO	IQOO	25,000

* **Update:** (Modifies existing data)

   Query:

      → Update mobile phone SET & ID = 2 WHERE
      Amount = 30,000

   1 row updated

* **Delete:** (Delete one or more rows from a table)

   Query:- 1 row deleted;

* **SELECT:** (Retrieves specific record that satisfy
      the conditions)

   Query:-

   - SELECT * FROM Mobile phones WHERE
     mobile = 'Redmi';

OUTPUT:-

ID	Mobile	Brand	Amount
2.	Redmi	POCO	151000

Result: Thus, the DDL and DML commands
using MYSQL has been implemented success
fully.

DDL and DML Commands
With Constraints

Aim: To execute DDL and DML Commands with Constraints for the database DDL (Data Definition Language) — Create, Alter, Drop, Truncate, Rename

DML (Data manipulation Language) — Insert, update, delete, select

Constraints — primary key, foreign key, NOT null, unique, check, default

1. DDL Commands for mobile phone purchasing Database management System:

1.1 CREATE Table

```
Create Table Customer (
    CUSTID INT PRIMARY KEY,
    Cust Name VARCHAR (50) NOT NULL,
    Email VARCHAR (100) UNIQUE
);

CREATE TABLE Mobile (
    Mobile ID INT PRIMARY KEY,
    Brand VARCHAR (50) NOT NULL,
    Model VARCHAR (50) NOT NULL,
    Price DECIMAL (10,2) CHECK (price
);
```

```sql
CREATE TABLE Purchase (
    Purchase_ID INT PRIMARY KEY,
    Cust_ID NOT NULL,
    Mobile_ID NOT NULL,
    Quantity INT CHECK (Quantity > 0),
    Purchase_Date DATE DEFAULT CURRENT
                                DATE,
    FOREIGN KEY (Cust_ID),
    REFERENCES Customer (Cust_ID),
    FOREIGN KEY (Mobile_ID)
    REFERENCES Mobile (Mobile_ID)
);

CREATE TABLE Payment (
    Payment_ID INT PRIMARY KEY,
    Purchase_ID INT UNIQUE,
    Amount DECIMAL (10,2) NOT NULL,
    Payment_Date DATE DEFAULT
    CURRENT_DATE,
    Payment_Method VARCHAR(20)
    CHECK (Payment_Method IN ('UPI','Card',
                'Netbanking','COD')),
    FOREIGN KEY (Purchase_ID)
    REFERENCES Purchase (Purchase_ID
);
```

1.2 ALTER TABLE

ALTER Table. Customer ADD COLUMN Gender
VARCHAR (10);

1.3 TRUNCATE Table

Truncate Table Category;

RESULT: All rows removed from Mobile
table Structure remains

1.4 RENAME TABLE

Rename Table Purchase To Purchasing;

2. DML Commands for Mobile Purchasing
database management System:

2.1 INSERT DATA

Insert into User values (121, '637378
574', 'Ganesh', 'ganesh@gmail.com', 'password
'chennai',);

1 row created

Insert into Purchase (values (Purchase ID,
cust, Mobile ID, Quantity, Purchase Date.)
VALUES (1, 101, 201, 2, '2025-08-26');

insert into Mobile value (1.' Android items');
row created.

insert into payment values (999, 111, 2025-
-08-19; 3000 pending)

row created

insert into Reviews values (101, 111, 711,
2025-08-20;);

4) Good product of worth 'it', product is
at its good post and afford to buy it);

row created

insert into payment values (1000, 999,
'2025-08-19', (completed),

Row created

Result: Rewards inserted successfully

(2.2) UPDATE DATA:

update Mobile set email = 'ganesh@gmail
com. where

Mobile id = 111;
After updation:

Query:

SQL7

select * from Mobile;

Mobile Id	Phone	Name	Email	Password	Address
111	6339987987	Ganesh	ganesh @gmail.com	#7	Chennai

2.3 DELETE DATA

Delete from payment Details where. payment
  . Detail Id = 1000;

After deletion:
  Query;
   Sql >
  select * from payment Details

payment details Id	payment Id
41	499

Product Id	Quantity	Price.
711	1	30000.

2.4 SELECT DATA

Used to retrieve information

Query :
   select * from Mobile.

Mobile ID	Name	Description	mageURL
711	realme	Branded mobile Phone	moto.jpg

Price	Stock	Qty	Discount	Category
80000	15	1	5	2

RESULT: Thus, the DDL and DML commands
for mobile phone purchasing database
management system was executed
successfully.