**ASSIGNMENT 4**

i. Create tables for Client, Product, and Salesman with the attributes given, implementing

DDL commands for specifying prime attributes, non-prime attributes, foreign keys,

cardinalities, null values, constraints etc. and the data types. Implement DDL commands

for drop, alter on the tables created.

ii. Implement DML commands like populating the tables with data using insert command

and retrieving data using simple queries in SQL. (Application of select, update, delete etc.)

iii. Exercise on retrieving records from a table:

i. Find out the names of all client master.

ii. Retrieve the entire contents of the Client\_Master table.

iii. Retrieve the list of names, city and state of all client master.

iv. List the various products available from the Product\_Master table.

v. List all clients who are located in Mumbai.

vi. Find the names of salesman who have a salary equal to 3000.

vii. Show the details of Product\_Master according to Cost\_Price in descending order.

viii. Show different types of salary amounts of the salesman.

ix. Show only unique product details.

iv. Exercise on updating records in a table:

i. Change the city of client no ‘C001’ to ‘Bangalore’.

ii. Change the BalDue of client no ‘C006’ to Rs. 1000.

iii. Change the cost price of ‘Trousers’ to Rs. 950.00.

iv. Change the city of the salesman to ‘Pune’.

v. Add a column called ‘Telephone’ of data type number and size = 10 to the Client\_Master table.

vi. Change the size of Sell\_Price column in Product\_Master to 10, 2.

vii. Drop the column Cost\_Price from Product\_Master.

viii. Delete all salesmen from the Salesman\_Master whose salaries are equal to Rs. 3500.

ix. Delete all products from Product\_Master where the quantity on hand is equal to 100.

x. Delete from Client\_Master where the column state holds the value ‘Tamil Nadu’.

xi. Change the name of the Salesman\_Master table to Sman\_Mast.

xii. Destroy the table Client\_Master along with its data.

CREATE TABLE CLIENT\_MASTER(

CLIENT\_NO VARCHAR2(6) PRIMARY KEY CHECK(CLIENT\_NO LIKE 'C%'),

NAME VARCHAR2(20) NOT NULL,

CITY VARCHAR2(15),

PINCODE NUMBER(8),

STATE VARCHAR2(15),

BAL\_DUE NUMBER(10,2)

);

CREATE TABLE PRODUCT\_MASTER(

PRODUCT\_NO VARCHAR2(6) PRIMARY KEY CHECK(PRODUCT\_NO LIKE 'P%'),

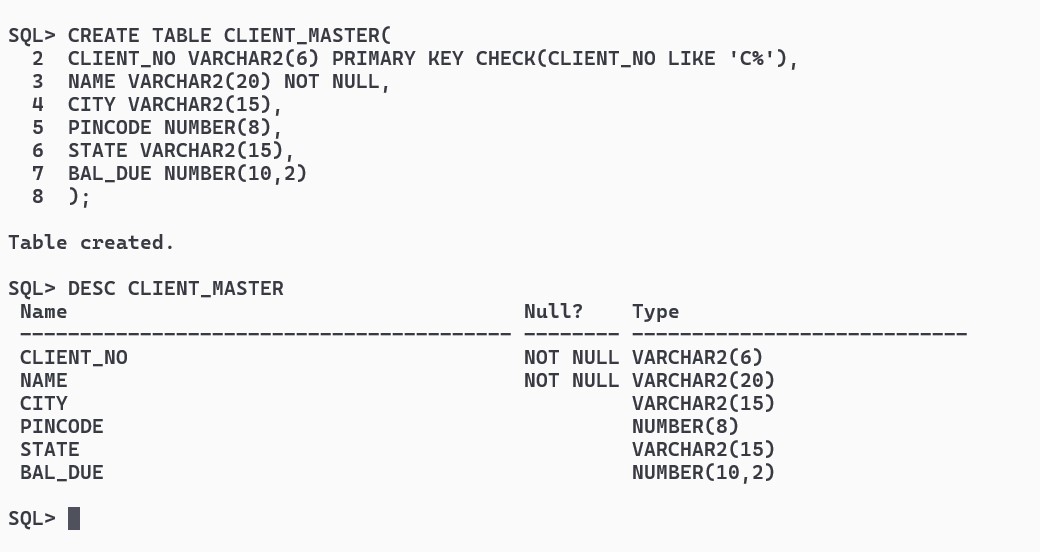
DESCRIPTION VARCHAR2(15) NOT NULL,

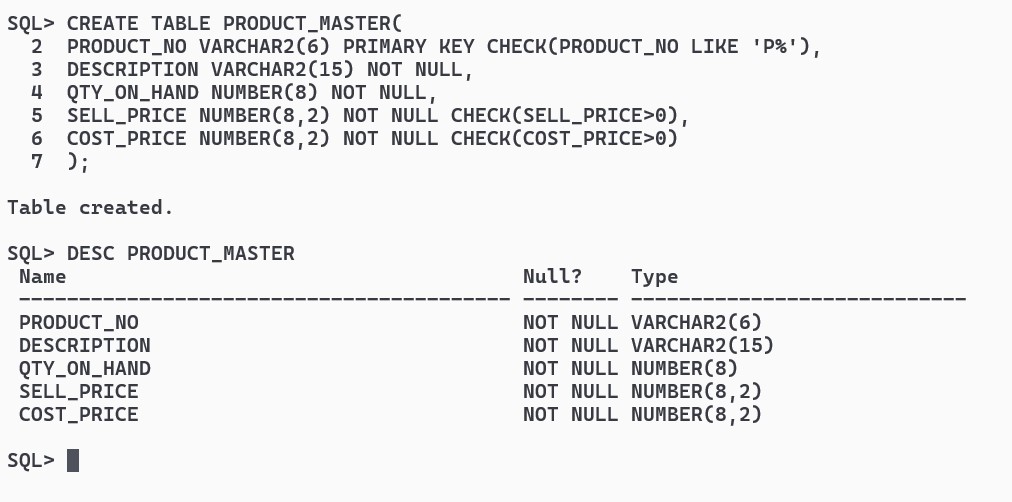
QTY\_ON\_HAND NUMBER(8) NOT NULL,

SELL\_PRICE NUMBER(8,2) NOT NULL CHECK(SELL\_PRICE>0),

COST\_PRICE NUMBER(8,2) NOT NULL CHECK(COST\_PRICE>0)

);





CREATE TABLE SALESMAN\_MASTER(

SALESMAN\_NO VARCHAR2(6) PRIMARY KEY CHECK(SALESMAN\_NO LIKE'S%' ),

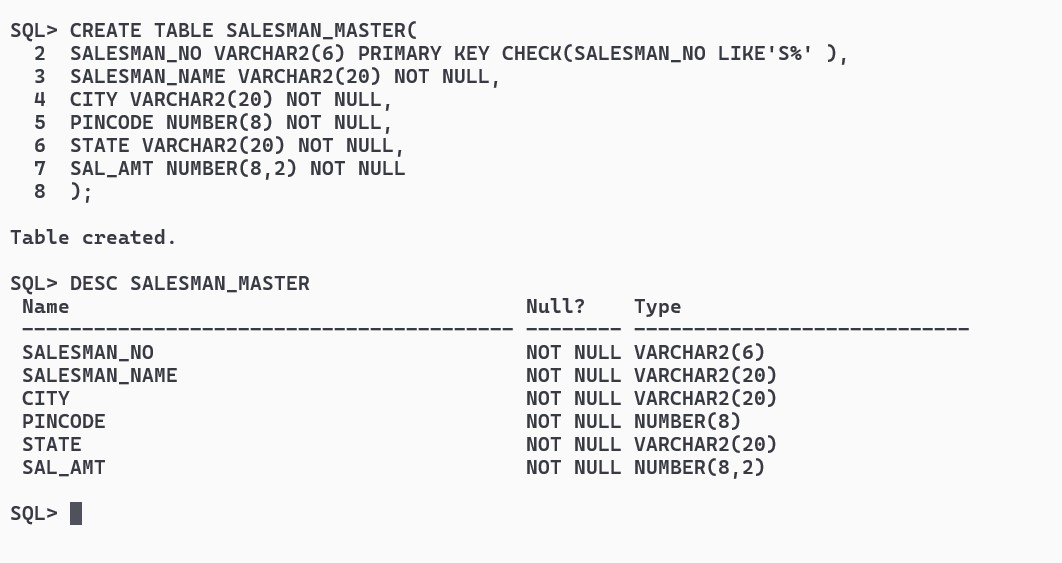
SALESMAN\_NAME VARCHAR2(20) NOT NULL,

CITY VARCHAR2(20) NOT NULL,

PINCODE NUMBER(8) NOT NULL,

STATE VARCHAR2(20) NOT NULL,

SAL\_AMT NUMBER(8,2) NOT NULL);



CREATE TABLE SALES\_ORDER(

ORDER\_NO VARCHAR2(6) PRIMARY KEY CHECK(ORDER\_NO LIKE 'O%'),

CLIENT\_NO VARCHAR2(6),

ORDER\_DATE DATE,

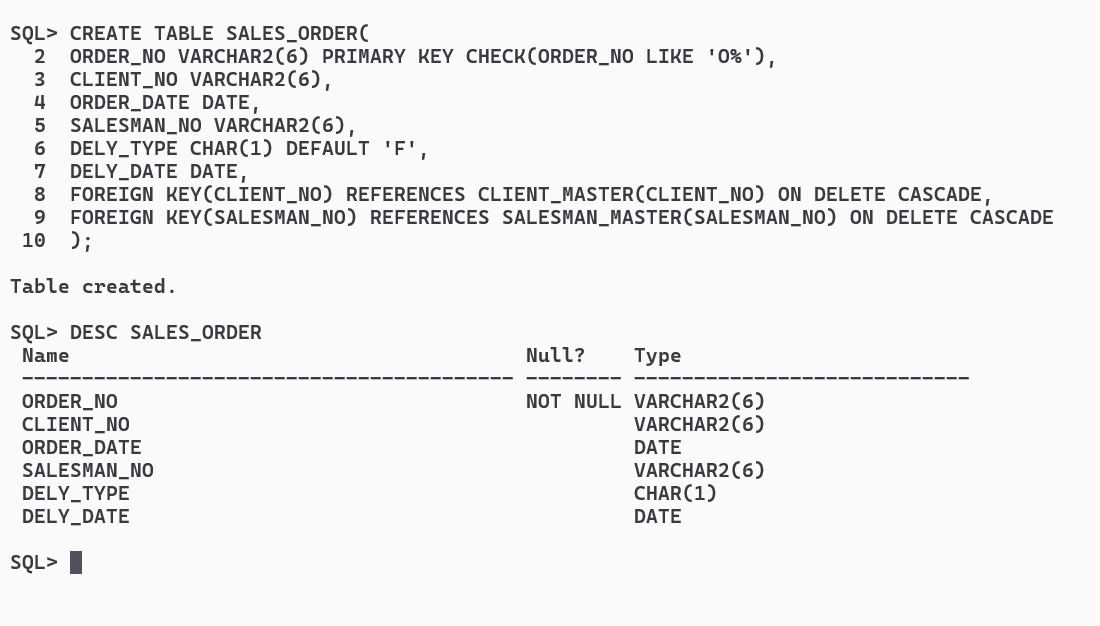
SALESMAN\_NO VARCHAR2(6),

DELY\_TYPE CHAR(1) DEFAULT 'F',

DELY\_DATE DATE,

FOREIGN KEY(CLIENT\_NO) REFERENCES CLIENT\_MASTER(CLIENT\_NO) ON DELETE CASCADE,

FOREIGN KEY(SALESMAN\_NO) REFERENCES SALESMAN\_MASTER(SALESMAN\_NO) ON DELETE CASCADE

); 

CREATE TABLE SALES\_ORDER\_DETAILS(

ORDER\_NO VARCHAR2(6),

PRODUCT\_NO VARCHAR2(6),

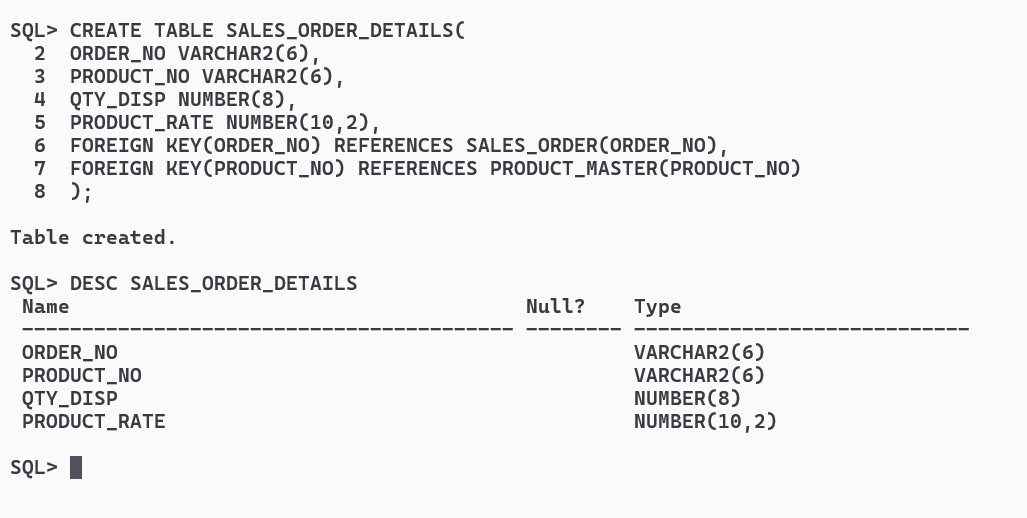
QTY\_DISP NUMBER(8),

PRODUCT\_RATE NUMBER(10,2),

FOREIGN KEY(ORDER\_NO) REFERENCES SALES\_ORDER(ORDER\_NO) ON DELETE CASCADE,

FOREIGN KEY(PRODUCT\_NO) REFERENCES PRODUCT\_MASTER(PRODUCT\_NO) ON DELETE CASCADE

);



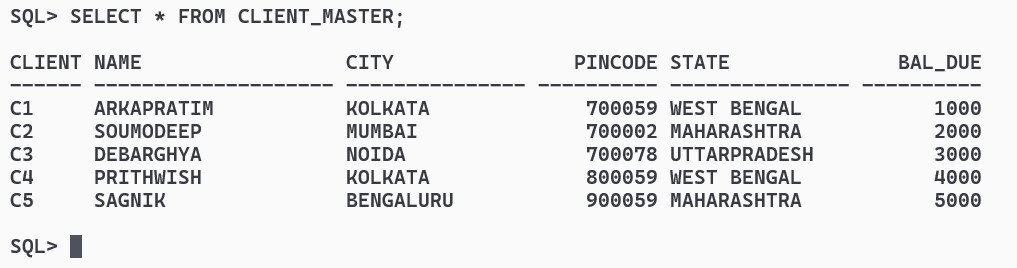
INSERT INTO CLIENT\_MASTER VALUES('C1','ARKAPRATIM','KOLKATA',700059,'WEST BENGAL',1000.00);

INSERT INTO CLIENT\_MASTER VALUES('C2','SOUMODEEP','MUMBAI',700002,'MAHARASHTRA',2000.00);

INSERT INTO CLIENT\_MASTER VALUES('C3','DEBARGHYA','NOIDA',700078,'UTTARPRADESH',3000.00);

INSERT INTO CLIENT\_MASTER VALUES('C4','PRITHWISH','KOLKATA',800059,'WEST BENGAL',4000.00);

INSERT INTO CLIENT\_MASTER VALUES('C5','SAGNIK','BENGALURU',900059,'MAHARASHTRA',5000.00);



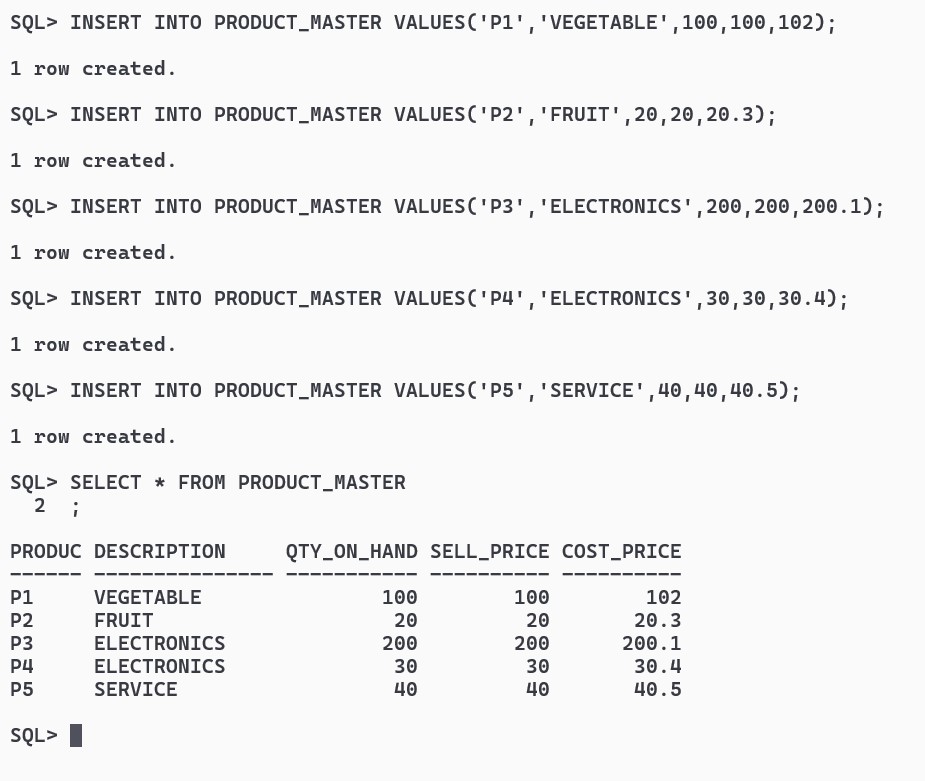
INSERT INTO PRODUCT\_MASTER VALUES('P1','VEGETABLE',100,100,102);

INSERT INTO PRODUCT\_MASTER VALUES('P2','FRUIT',20,20,20.3);

INSERT INTO PRODUCT\_MASTER VALUES('P3','ELECTRONICS',200,200,200.1);

INSERT INTO PRODUCT\_MASTER VALUES('P4','ELECTRONICS',30,30,30.4);

INSERT INTO PRODUCT\_MASTER VALUES('P5','SERVICE',40,40,40.5);



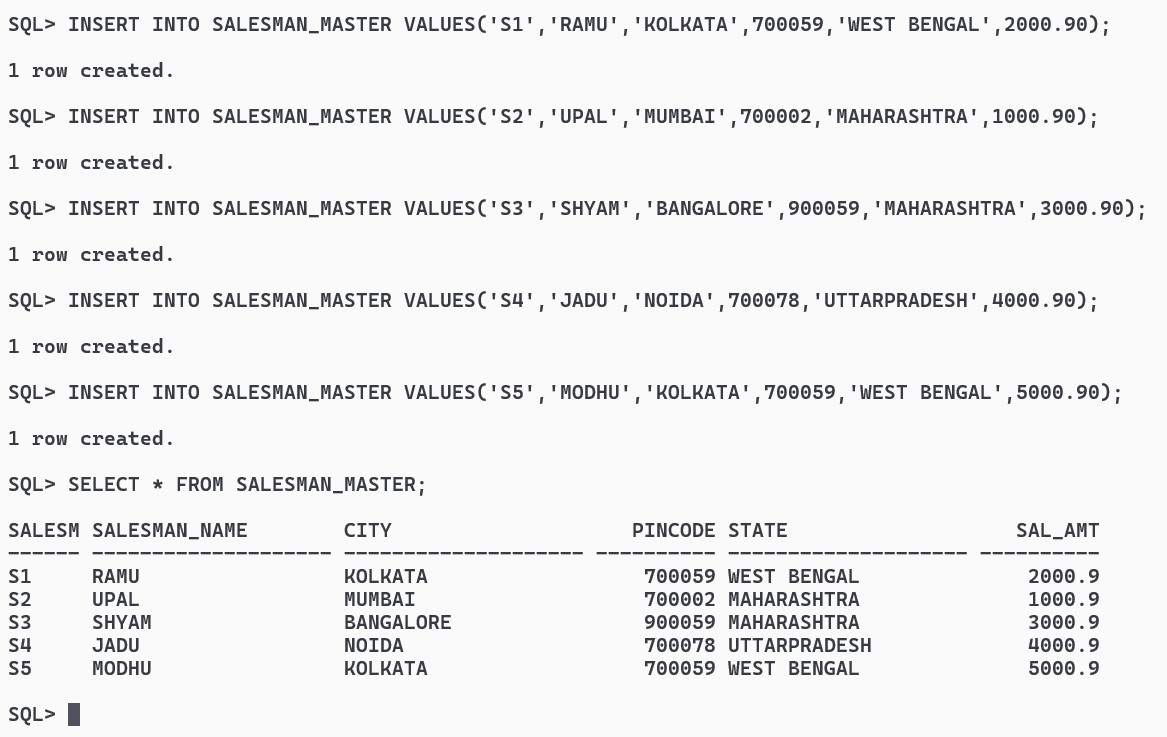
INSERT INTO SALESMAN\_MASTER VALUES('S1','RAMU','KOLKATA',700059,'WEST BENGAL',2000.90);

INSERT INTO SALESMAN\_MASTER VALUES('S2','UPAL','MUMBAI',700002,'MAHARASHTRA',1000.90);

INSERT INTO SALESMAN\_MASTER VALUES('S3','SHYAM','BANGALORE',900059,'MAHARASHTRA',3000.90);

INSERT INTO SALESMAN\_MASTER VALUES('S4','JADU','NOIDA',700078,'UTTARPRADESH',4000.90);

INSERT INTO SALESMAN\_MASTER VALUES('S5','MODHU','KOLKATA',700059,'WEST BENGAL',5000.90);



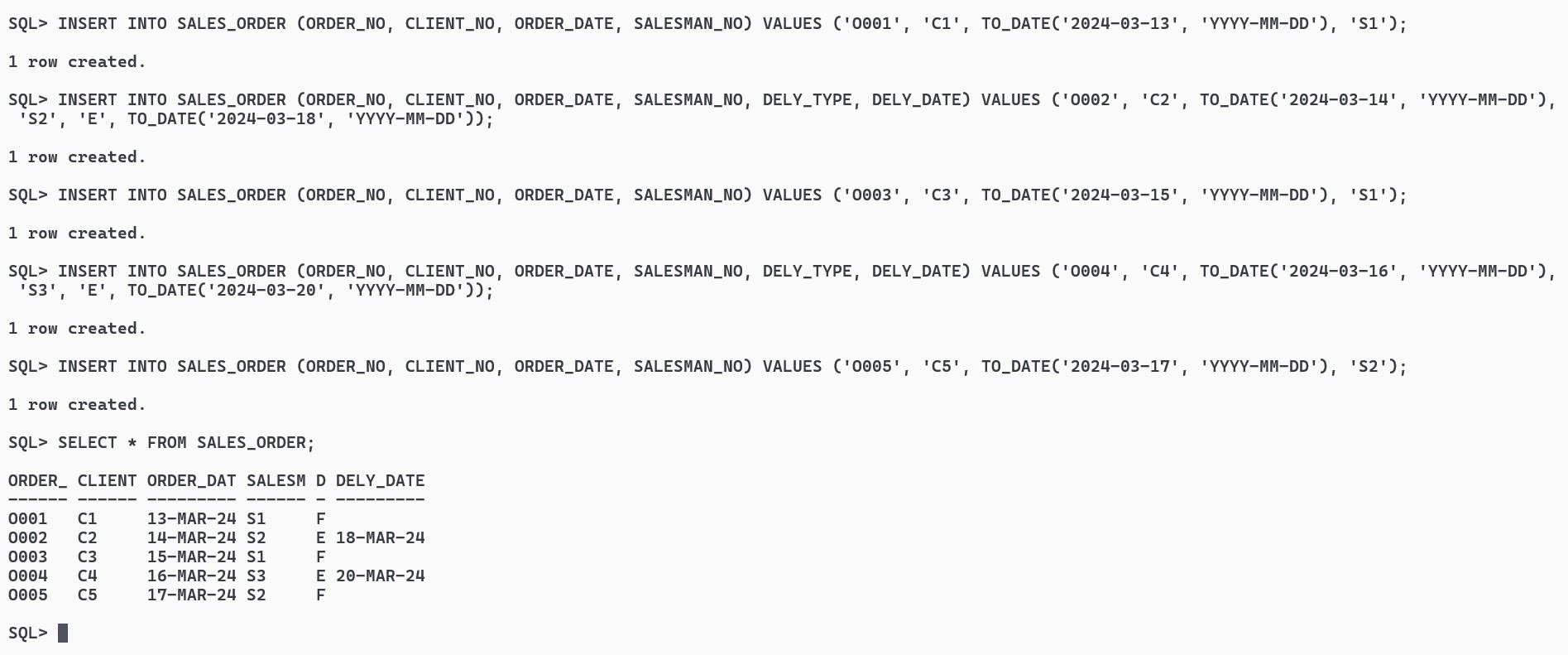
INSERT INTO SALES\_ORDER (ORDER\_NO, CLIENT\_NO, ORDER\_DATE, SALESMAN\_NO) VALUES ('O001', 'C1', TO\_DATE('2024-03-13', 'YYYY-MM-DD'), 'S1');

INSERT INTO SALES\_ORDER (ORDER\_NO, CLIENT\_NO, ORDER\_DATE, SALESMAN\_NO, DELY\_TYPE, DELY\_DATE) VALUES ('O002', 'C2', TO\_DATE('2024-03-14', 'YYYY-MM-DD'), 'S2', 'E', TO\_DATE('2024-03-18', 'YYYY-MM-DD'));

INSERT INTO SALES\_ORDER (ORDER\_NO, CLIENT\_NO, ORDER\_DATE, SALESMAN\_NO) VALUES ('O003', 'C3', TO\_DATE('2024-03-15', 'YYYY-MM-DD'), 'S1');

INSERT INTO SALES\_ORDER (ORDER\_NO, CLIENT\_NO, ORDER\_DATE, SALESMAN\_NO, DELY\_TYPE, DELY\_DATE) VALUES ('O004', 'C4', TO\_DATE('2024-03-16', 'YYYY-MM-DD'), 'S3', 'E', TO\_DATE('2024-03-20', 'YYYY-MM-DD'));

INSERT INTO SALES\_ORDER (ORDER\_NO, CLIENT\_NO, ORDER\_DATE, SALESMAN\_NO) VALUES ('O005', 'C5', TO\_DATE('2024-03-17', 'YYYY-MM-DD'), 'S2');



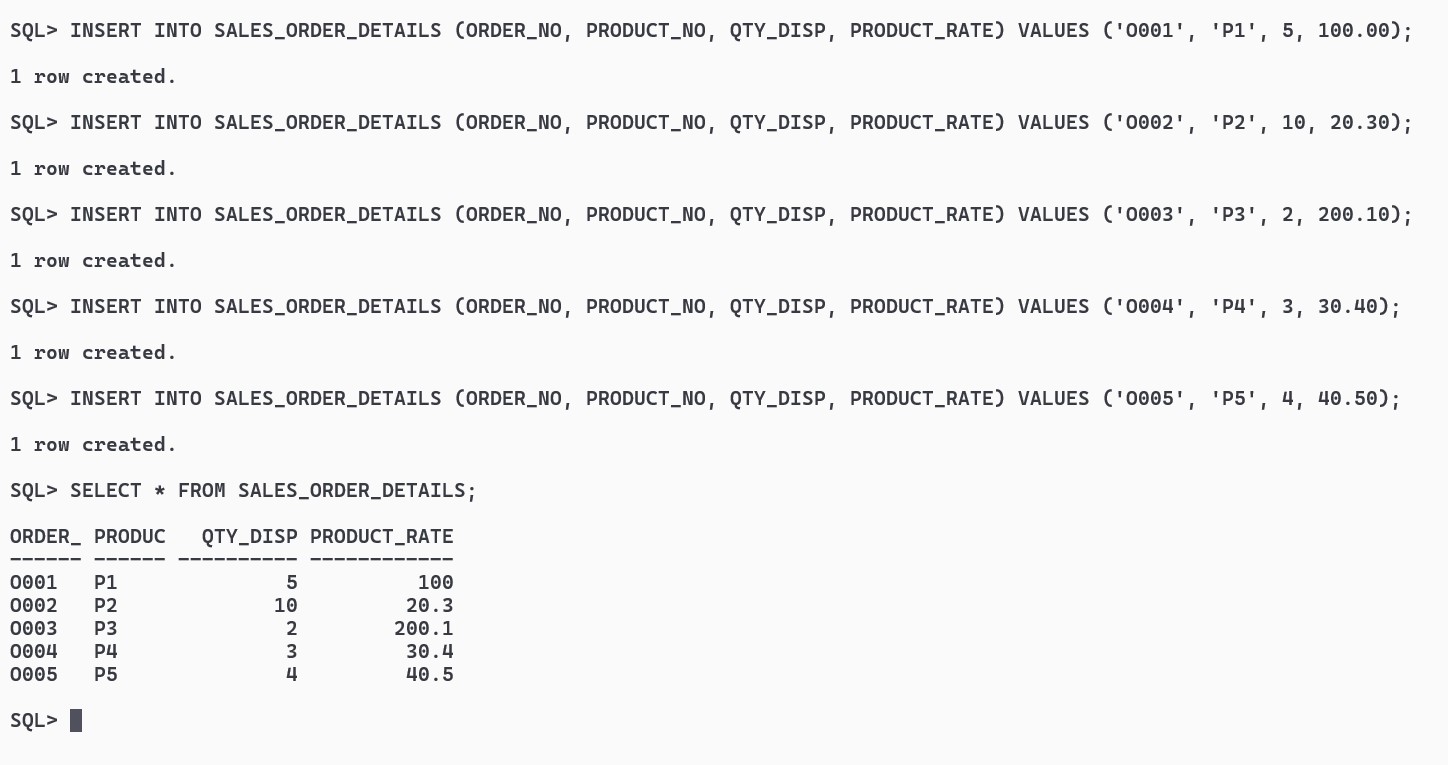
INSERT INTO SALES\_ORDER\_DETAILS (ORDER\_NO, PRODUCT\_NO, QTY\_DISP, PRODUCT\_RATE) VALUES ('O001', 'P1', 5, 100.00);

INSERT INTO SALES\_ORDER\_DETAILS (ORDER\_NO, PRODUCT\_NO, QTY\_DISP, PRODUCT\_RATE) VALUES ('O002', 'P2', 10, 20.30);

INSERT INTO SALES\_ORDER\_DETAILS (ORDER\_NO, PRODUCT\_NO, QTY\_DISP, PRODUCT\_RATE) VALUES ('O003', 'P3', 2, 200.10);

INSERT INTO SALES\_ORDER\_DETAILS (ORDER\_NO, PRODUCT\_NO, QTY\_DISP, PRODUCT\_RATE) VALUES ('O004', 'P4', 3, 30.40);

INSERT INTO SALES\_ORDER\_DETAILS (ORDER\_NO, PRODUCT\_NO, QTY\_DISP, PRODUCT\_RATE) VALUES ('O005', 'P5', 4, 40.50);



SELECT NAME FROM CLIENT\_MASTER;

SELECT NAME, CITY, STATE FROM CLIENT\_MASTER;

SELECT DESCRIPTION FROM PRODUCT\_MASTER;

SELECT \* FROM CLIENT\_MASTER WHERE CITY = 'MUMBAI';

SELECT SALESMAN\_NAME FROM SALESMAN\_MASTER WHERE SAL\_AMT = 3000;

SELECT \* FROM PRODUCT\_MASTER ORDER BY COST\_PRICE DESC;

SELECT DISTINCT SAL\_AMT FROM SALESMAN\_MASTER;

SELECT DISTINCT \* FROM PRODUCT\_MASTER;

UPDATE CLIENT\_MASTER SET CITY = 'Bangalore' WHERE CLIENT\_NO = 'C1';

UPDATE CLIENT\_MASTER SET BAL\_DUE = 1000 WHERE CLIENT\_NO = 'C6';

SELECT \* FROM CLIENT\_MASTER;

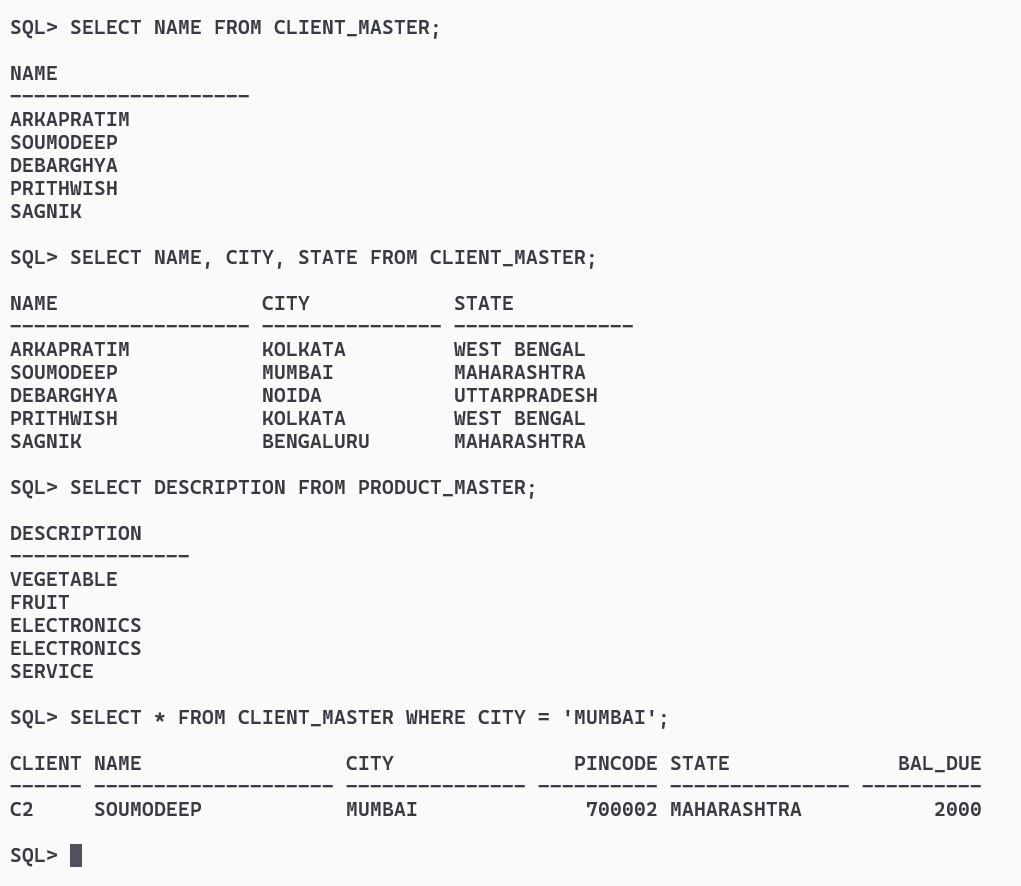
UPDATE PRODUCT\_MASTER SET DESCRIPTION = 'Trousers' WHERE PRODUCT\_NO = 'P1';

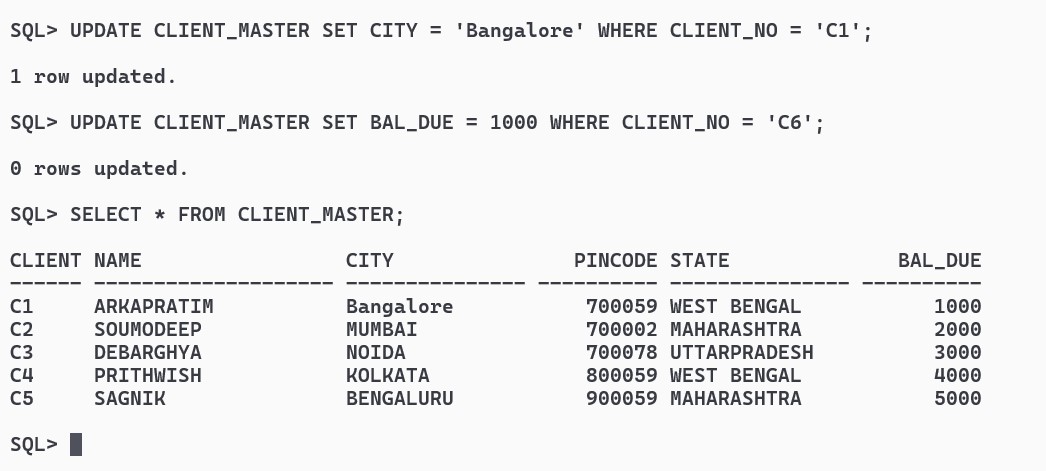
UPDATE PRODUCT\_MASTER SET COST\_PRICE = 950.00 WHERE DESCRIPTION = 'Trousers';

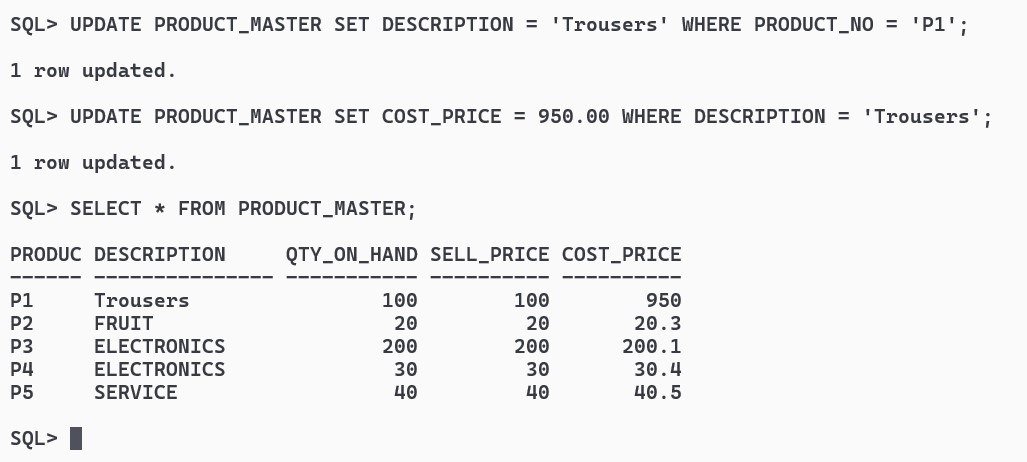
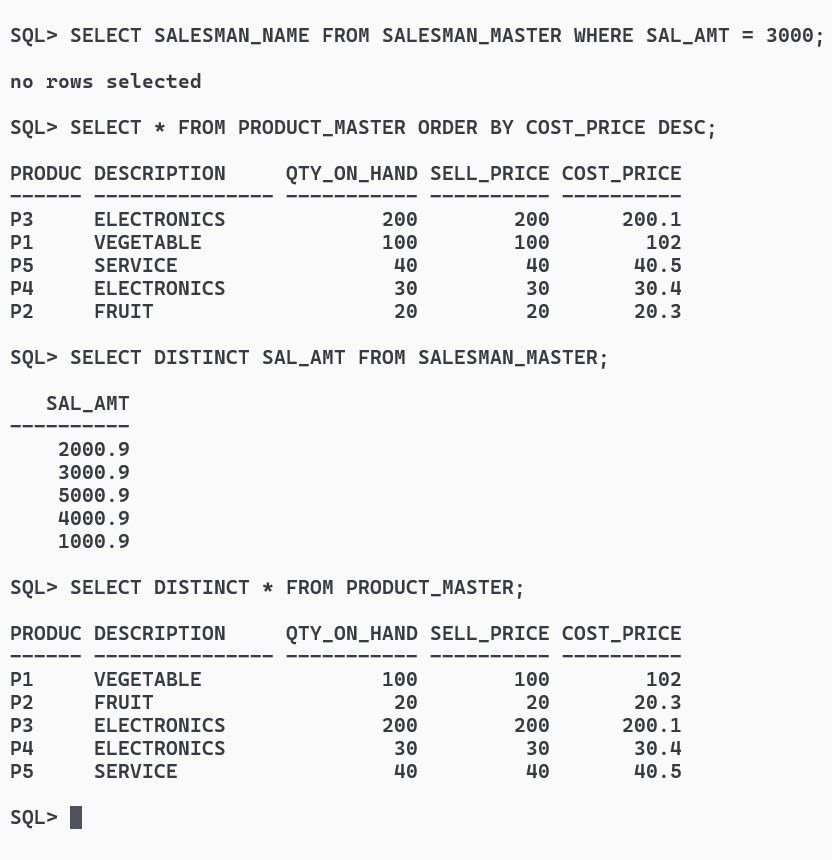
SELECT \* FROM PRODUCT\_MASTER;

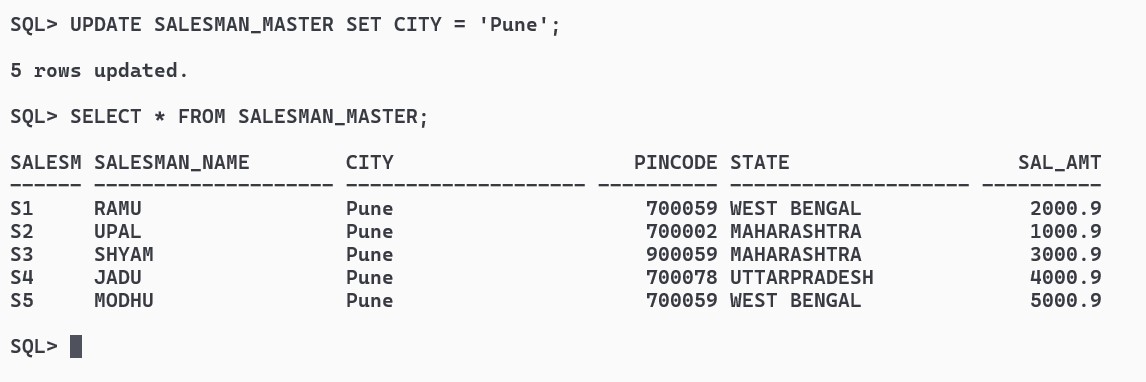
UPDATE SALESMAN\_MASTER SET CITY = 'Pune';

SELECT \* FROM SALESMAN\_MASTER;









ALTER TABLE CLIENT\_MASTER ADD Telephone NUMBER(10);

ALTER TABLE PRODUCT\_MASTER MODIFY Sell\_Price NUMBER(10,2);

ALTER TABLE PRODUCT\_MASTER DROP COLUMN Cost\_Price;

DELETE FROM SALESMAN\_MASTER WHERE SAL\_AMT = 3500;

DELETE FROM PRODUCT\_MASTER WHERE QTY\_ON\_HAND = 100;

DELETE FROM CLIENT\_MASTER WHERE state = 'Tamil Nadu';

ALTER TABLE SALESMAN\_MASTER RENAME TO Sman\_Mast;

SELECT CONSTRAINT\_NAME FROM USER\_CONSTRAINTS WHERE TABLE\_NAME = 'SALES\_ORDER' AND (R\_CONSTRAINT\_NAME IN (SELECT CONSTRAINT\_NAME FROM USER\_CONSTRAINTS WHERE TABLE\_NAME = 'CLIENT\_MASTER'));

DROP TABLE CLIENT\_MASTER;

