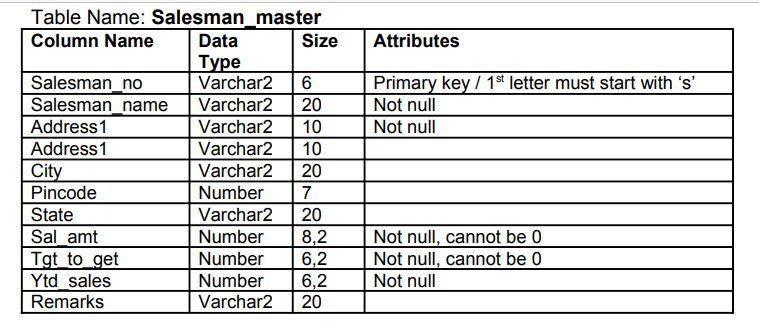
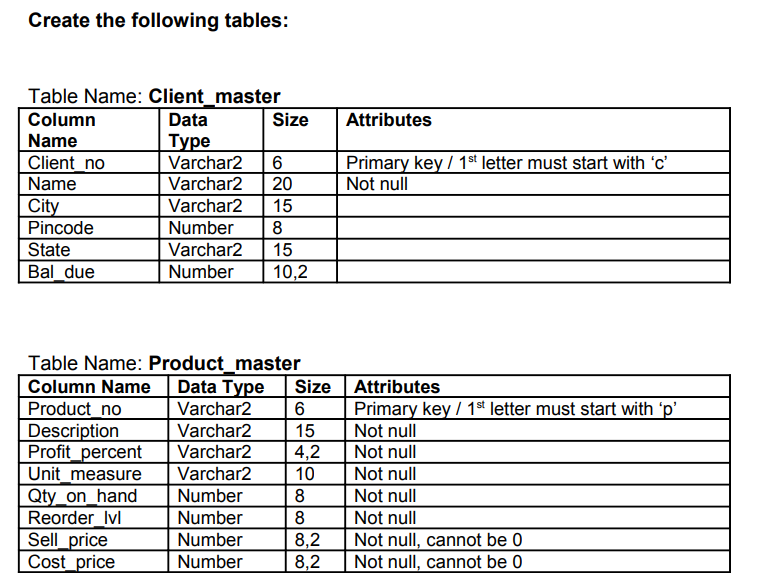
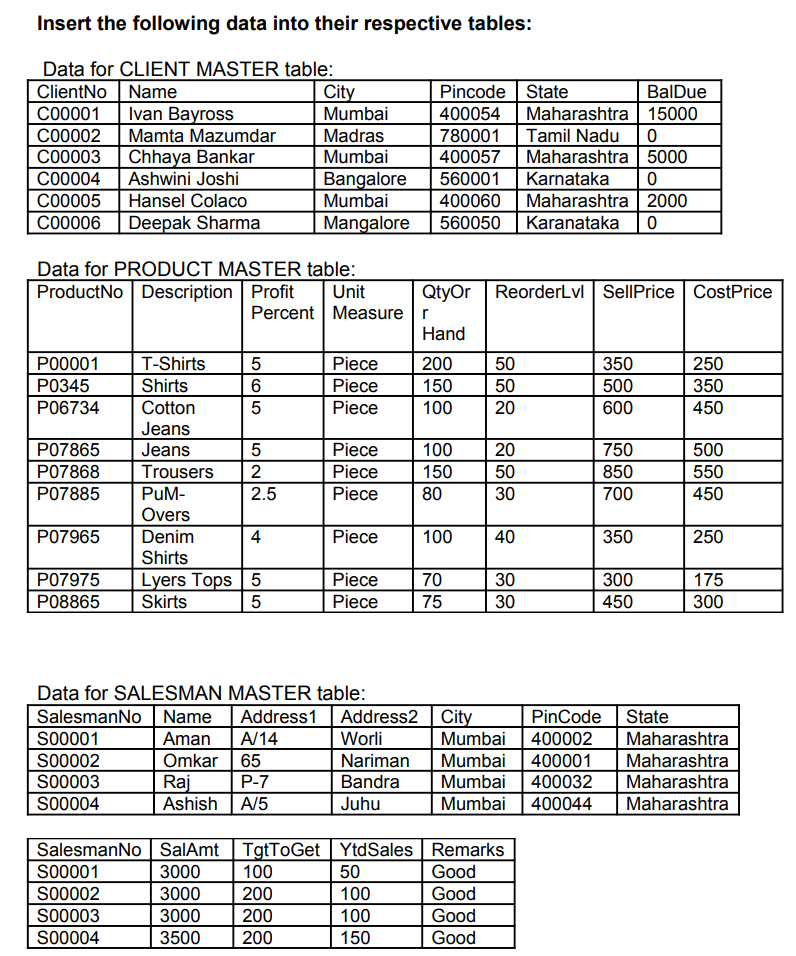
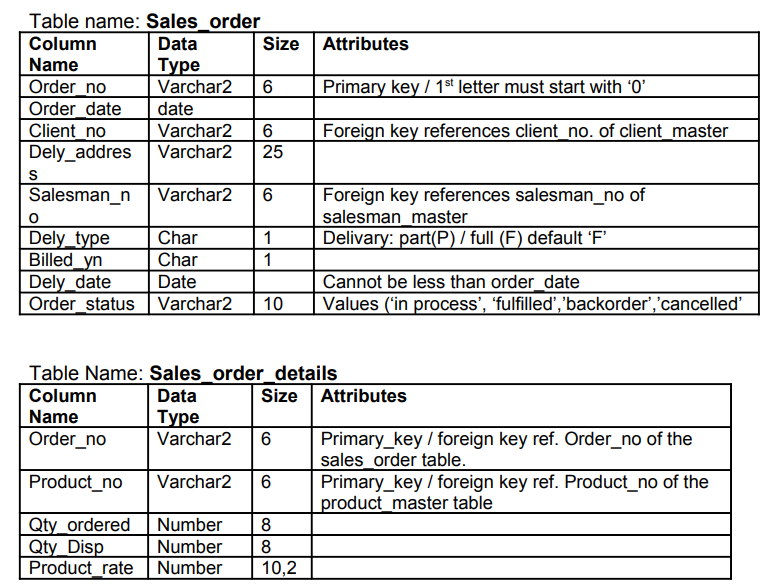
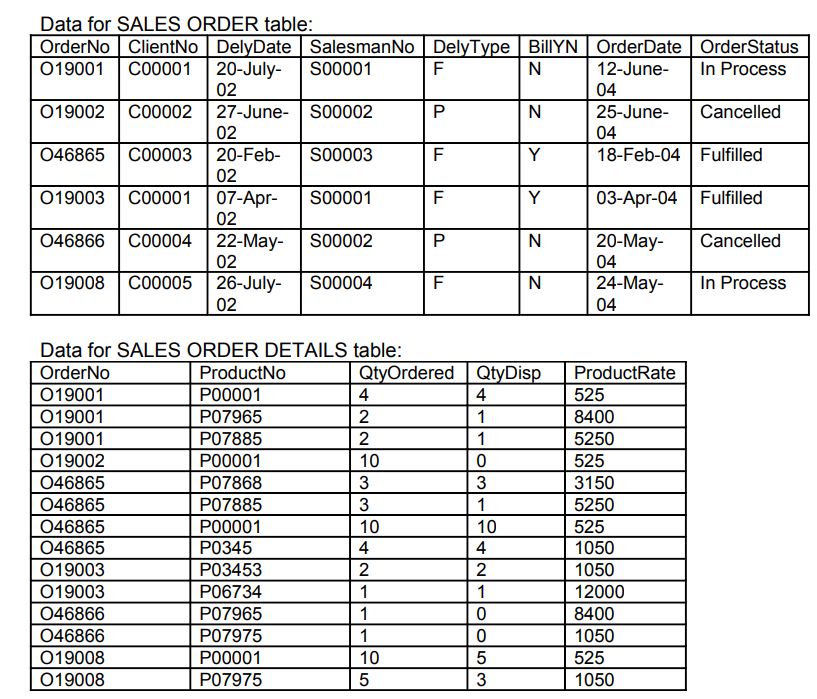
ASSIGNMENT 2







create table Client\_master (

Client\_no varchar2(6) **Check (Client\_no LIKE 'C%') PRIMARY KEY,**

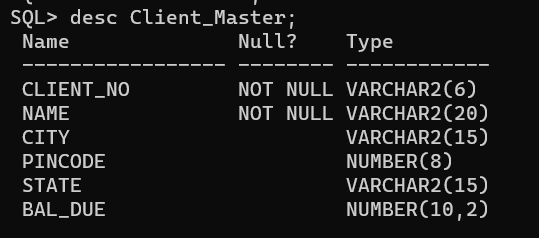
Name Varchar2(20) NOT NULL,

City Varchar2(15),

Pincode Number(8),

State Varchar2(15),

Bal\_due Number(10,2));



INSERT ALL

INTO Client\_master (Client\_no,Name,City,Pincode,State,Bal\_due) VALUES ('C00001','Iavn Bayross','Mumbai',400054,'Maharashtra',15000)

INTO Client\_master (Client\_no,Name,City,Pincode,State,Bal\_due) VALUES ('C00002','Mamta Mazumdar','Madras',780001,'Tamil Nadu',0)

INTO Client\_master (Client\_no,Name,City,Pincode,State,Bal\_due) VALUES ('C00003','Chhaya Bankar','Mumbai',400057,'Maharashtra',5000)

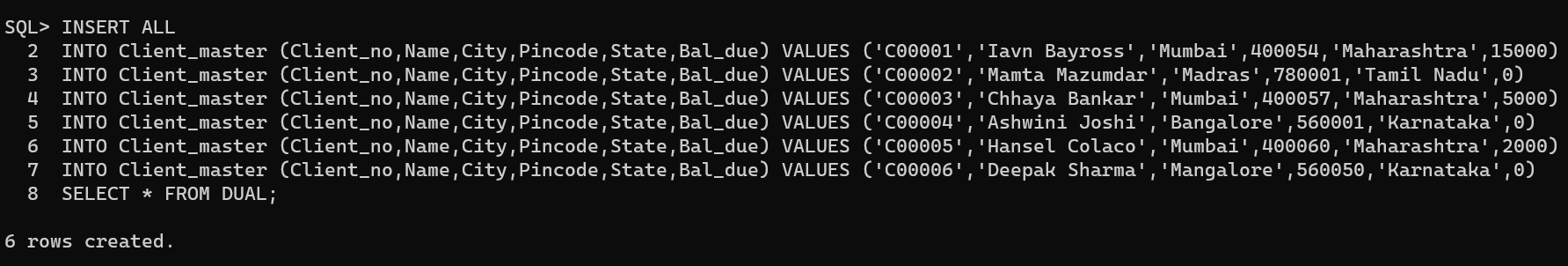
INTO Client\_master (Client\_no,Name,City,Pincode,State,Bal\_due) VALUES ('C00004','Ashwini Joshi','Bangalore',560001,'Karnataka',0)

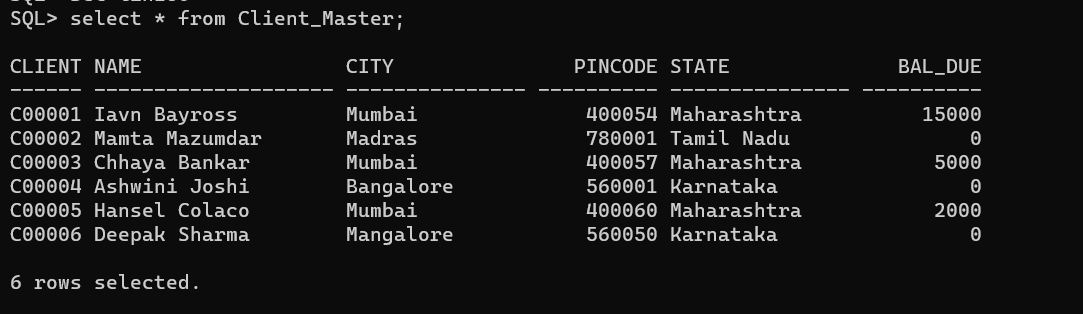
INTO Client\_master (Client\_no,Name,City,Pincode,State,Bal\_due) VALUES ('C00005','Hansel Colaco','Mumbai',400060,'Maharashtra',2000)

INTO Client\_master (Client\_no,Name,City,Pincode,State,Bal\_due) VALUES ('C00006','Deepak Sharma','Mangalore',560050,'Karnataka',0)

SELECT \* FROM DUAL;

**Instead of SELECT \* FROM DUAL; you may write SELECT 1 FROM DUAL; also**





create table Product\_master (

product\_no Varchar2(6) Check (Product\_no LIKE 'P%') PRIMARY KEY,

Description Varchar2(15) NOT NULL,

Profit\_percent Number(4,2) NOT NULL,

Unit\_measure Varchar2(10) NOT NULL,

Qty\_on\_hand Number(8) NOT NULL,

Reorder\_lvl Number(8) NOT NULL,

Sell\_price Number(8,2) **check(Sell\_price < > 0) NOT NULL**,

Cost\_price Number(8,2) check(Cost\_price < > 0) NOT NULL);

INSERT ALL

INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P00001','T-shirt',5,'Piece',200,50,350,250)

INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P0345','Shirt',6,'Piece',150,50,500,350)

INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P06734','Cotton Jeans',5,'Piece',100,20,600,450)

INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P07865','Jeans',5,'Piece',100,20,750,500)

INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P07868','Trousers',2,'Piece',150,50,850,550)

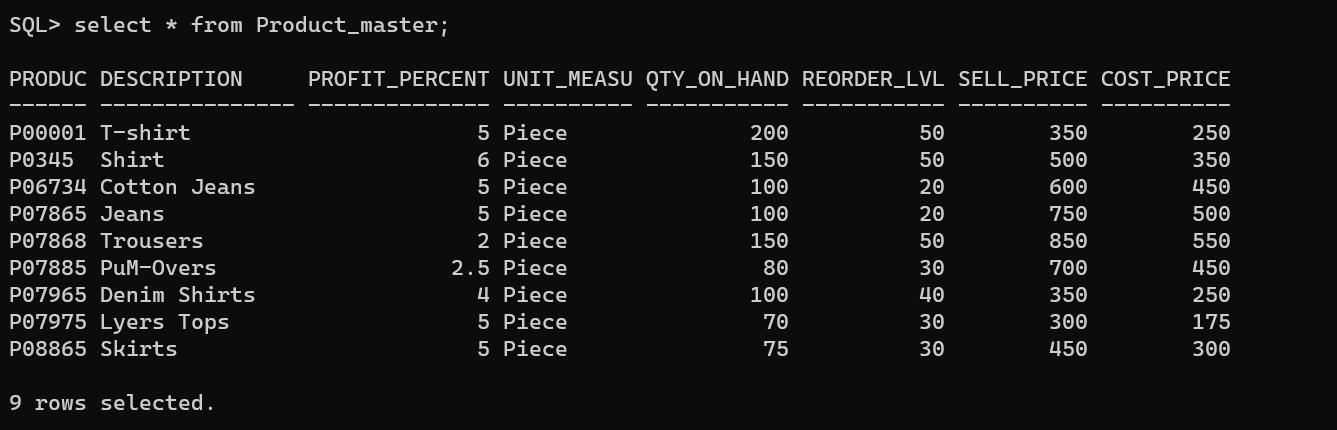
INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P07885','PuM-Overs',2.5,'Piece',80,30,700,450)

INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P07965','Denim Shirts',4,'Piece',100,40,350,250)

INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P07975','Lyers Tops',5,'Piece',70,30,300,175)

INTO Product\_master (product\_no,Description,Profit\_percent,Unit\_measure,Qty\_on\_hand,Reorder\_lvl,Sell\_price,Cost\_price) VALUES ('P08865','Skirts',5,'Piece',75,30,450,300)

SELECT \* FROM DUAL;



create table Salesman\_master (

Salesman\_no Varchar2(6) check(Salesman\_no LIKE 'S%') PRIMARY KEY,

Salesman\_name Varchar2(20) NOT NULL,

Address1 Varchar2(10) NOT NULL,

Address2 Varchar2(10),

City Varchar2(20),

Pincode Number(7),

State Varchar2(20),

Sal\_amt Number(8,2) check(Sal\_amt <> 0) NOT NULL,

Tgt\_to\_get Number(6,2) check(Tgt\_to\_get <> 0) NOT NULL,

Ytd\_sales Number(6,2) NOT NULL,

Remarks Varchar2(20));

INSERT ALL

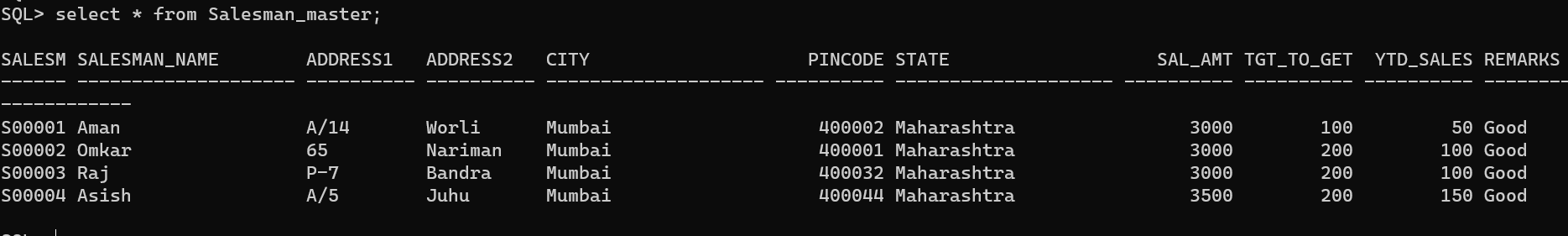
INTO Salesman\_master (Salesman\_no,Salesman\_name,Address1,Address2,City,Pincode,State,Sal\_amt,Tgt\_to\_get,Ytd\_sales,Remarks) VALUES ('S00001','Aman','A/14','Worli','Mumbai',400002,'Maharashtra',3000,100,50,'Good')

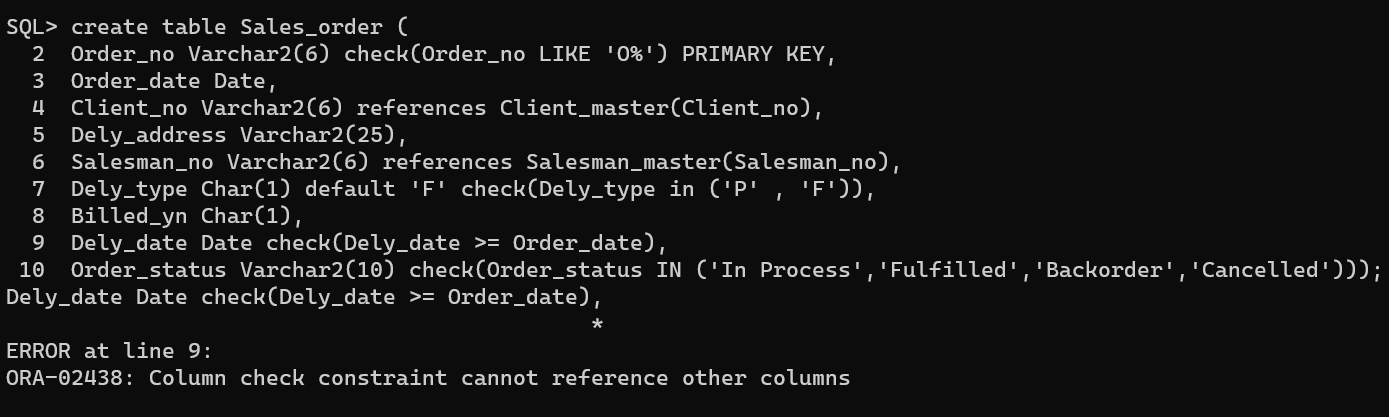
INTO Salesman\_master (Salesman\_no,Salesman\_name,Address1,Address2,City,Pincode,State,Sal\_amt,Tgt\_to\_get,Ytd\_sales,Remarks) VALUES ('S00002','Omkar','65','Nariman','Mumbai',400001,'Maharashtra',3000,200,100,'Good')

INTO Salesman\_master (Salesman\_no,Salesman\_name,Address1,Address2,City,Pincode,State,Sal\_amt,Tgt\_to\_get,Ytd\_sales,Remarks) VALUES ('S00003','Raj','P-7','Bandra','Mumbai',400032,'Maharashtra',3000,200,100,'Good')

INTO Salesman\_master (Salesman\_no,Salesman\_name,Address1,Address2,City,Pincode,State,Sal\_amt,Tgt\_to\_get,Ytd\_sales,Remarks) VALUES ('S00004','Asish','A/5','Juhu','Mumbai',400044,'Maharashtra',3500,200,150,'Good')

SELECT \* FROM DUAL;







create table Sales\_order (

Order\_no Varchar2(6) check(Order\_no LIKE 'O%') PRIMARY KEY,

Order\_date Date,

Client\_no Varchar2(6) references Client\_master(Client\_no),

Dely\_address Varchar2(25),

Salesman\_no Varchar2(6) references Salesman\_master(Salesman\_no),

Dely\_type Char(1) default 'F' check(Dely\_type in ('P' , 'F')),

Billed\_yn Char(1),

Dely\_date Date,

constraint ck\_date\_correct check(Dely\_date >= Order\_date),

//ck\_date\_correct can be any variable

Order\_status Varchar2(10) check(Order\_status IN ('In Process','Fulfilled','Backorder','Cancelled')));

INSERT ALL

INTO Sales\_order (Order\_no,Order\_date,Client\_no,Dely\_address,Salesman\_no,Dely\_type,Billed\_yn,Dely\_date,Order\_status) VALUES ('O19001','12-JUN-2004','C00001',NULL,'S00001','F','N','20-JUL-2004','In Process')

INTO Sales\_order (Order\_no,Order\_date,Client\_no,Dely\_address,Salesman\_no,Dely\_type,Billed\_yn,Dely\_date,Order\_status) VALUES ('O19002','5-JUN-2004','C00002',NULL,'S00002','P','N','27-JUN-2004','Cancelled')

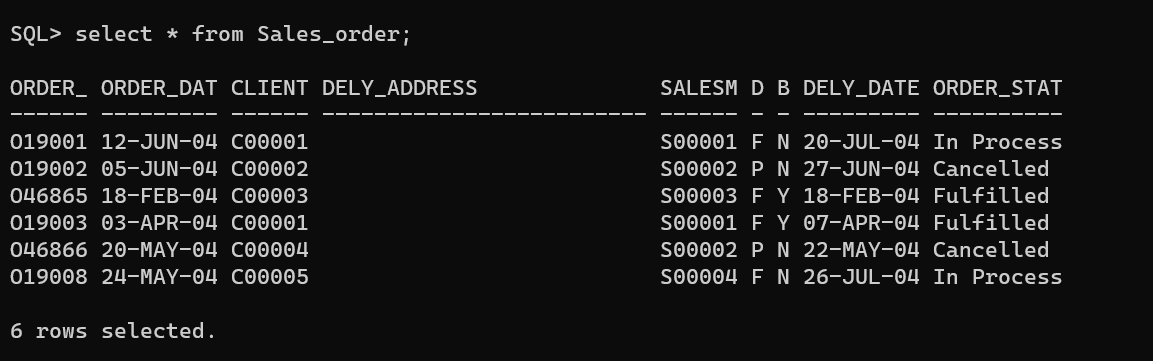
INTO Sales\_order (Order\_no,Order\_date,Client\_no,Dely\_address,Salesman\_no,Dely\_type,Billed\_yn,Dely\_date,Order\_status) VALUES ('O46865','18-FEB-2004','C00003',NULL,'S00003','F','Y','18-FEB-2004','Fulfilled')

INTO Sales\_order (Order\_no,Order\_date,Client\_no,Dely\_address,Salesman\_no,Dely\_type,Billed\_yn,Dely\_date,Order\_status) VALUES ('O19003','03-APR-2004','C00001',NULL,'S00001','F','Y','07-APR-2004','Fulfilled')

INTO Sales\_order (Order\_no,Order\_date,Client\_no,Dely\_address,Salesman\_no,Dely\_type,Billed\_yn,Dely\_date,Order\_status) VALUES ('O46866','20-MAY-2004','C00004',NULL,'S00002','P','N','22-MAY-2004','Cancelled')

INTO Sales\_order (Order\_no,Order\_date,Client\_no,Dely\_address,Salesman\_no,Dely\_type,Billed\_yn,Dely\_date,Order\_status) VALUES ('O19008','24-MAY-2004','C00005',NULL,'S00004','F','N','26-JUL-2004','In Process')

SELECT \* FROM DUAL;

****

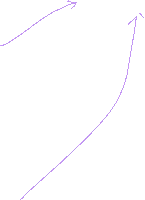
Both are ways to represents foreign key, in first case you do reference at the time of declaration only.

Note

CREATE TABLE SALES\_ORDER\_DETAILS(

**ORDER\_NO VARCHAR2(6) REFERENCES SALES\_ORDER(ORDER\_NO),**

PRODUCT\_NO VARCHAR(6),



QTY\_ORDERED NUMBER(8),

QTY\_DISP NUMBER(8),

PRODUCT\_RATE NUMBER(10,2),

FOREIGN kEY(PRODUCT\_NO) REFERENCES PRODUCT\_MASTER(PRODUCT\_NO),

PRIMARY KEY(ORDER\_NO,PRODUCT\_NO));

create table Sales\_order\_details (

Order\_no Varchar2(6),

FOREIGN KEY (Order\_no) REFERENCES Sales\_order(Order\_no),

Product\_no varchar2(6),

FOREIGN KEY (Product\_no) REFERENCES Product\_master(PRODUCT\_NO),

Oty\_ordered Number(8),

Qty\_disp Number(8),

Product\_rate Number(10,2),

PRIMARY KEY(Order\_no,Product\_no));

INSERT ALL

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O19001','P00001',4,4,525)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O19001','P07965',2,1,8400)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O19001','P07885',2,1,5250)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O19002','P00001',10,0,525)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O46865','P07868',3,3,3150)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O46865','P07885',3,1,5250)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O46865','P00001',10,10,525)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O46865','P0345',4,4,1050)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O19003','P0345',2,2,1050)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O19003','P06734',1,1,12000)

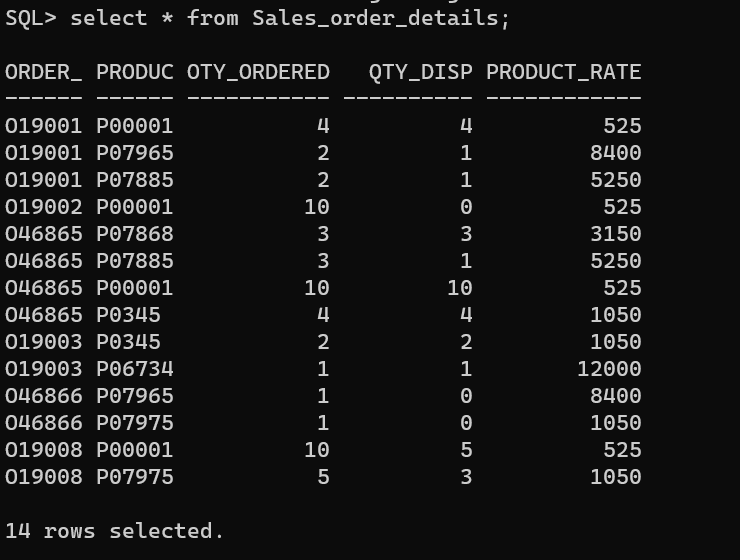
INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O46866','P07965',1,0,8400)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O46866','P07975',1,0,1050)

INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O19008','P00001',10,5,525)

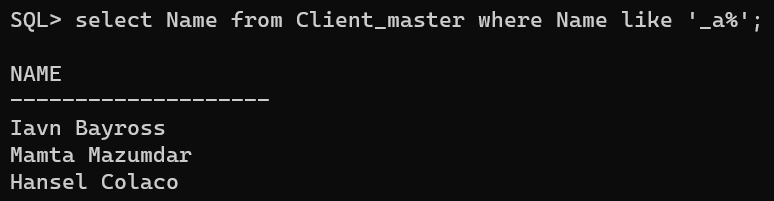
INTO Sales\_order\_details (Order\_no,Product\_no,Oty\_ordered,Qty\_disp,Product\_rate) VALUES ('O19008','P07975',5,3,1050)

SELECT \* FROM DUAL;

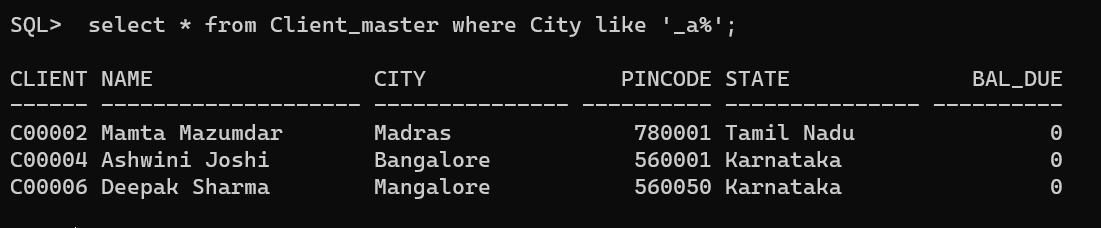


Write necessary SQL queries for the following:

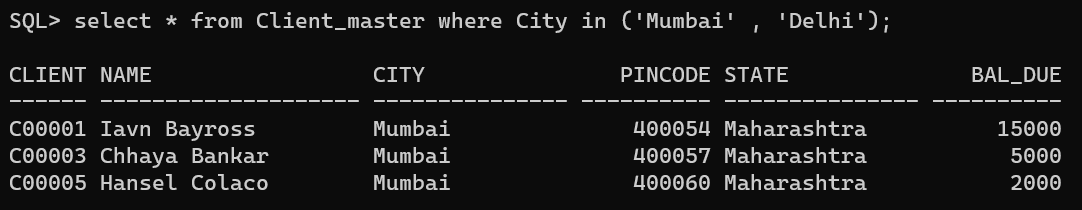
1) Find the names of all clients having ‘a’ as the second letter in their names.



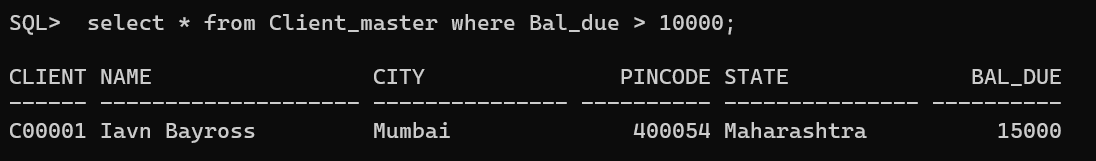
2) Find out the clients who stay in a city whose second letter is 'a'.



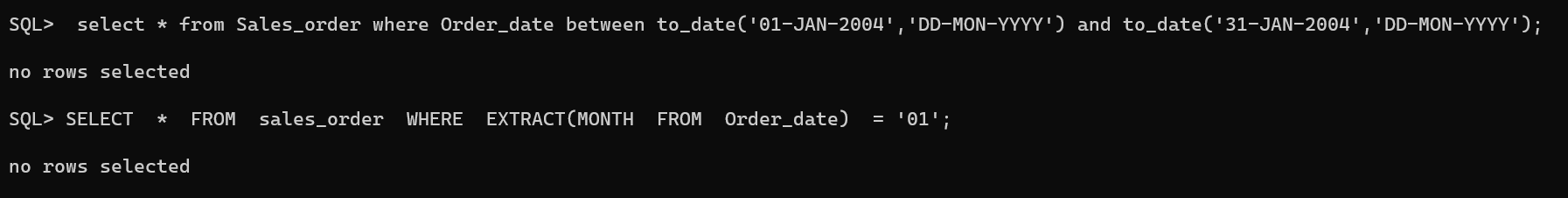
3) Find the list of all clients who stay in 'Bombay' or 'Delhi'



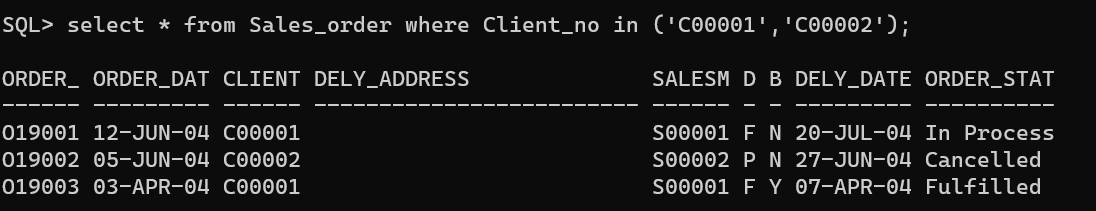
4) Print the list of clients whose bal\_due is greater than value 10000.



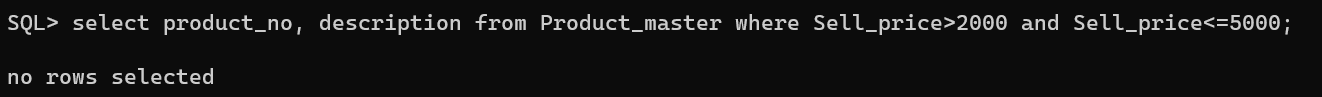
5) Print the information from sales\_order table for orders placed in the month of January.



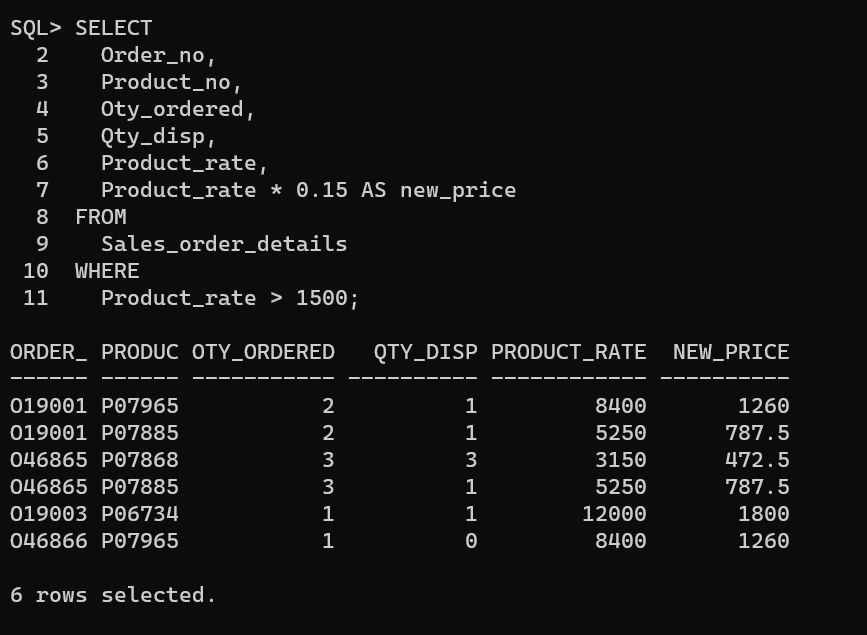
6) Display the order information for client\_no 'C00001' and 'C00002'.



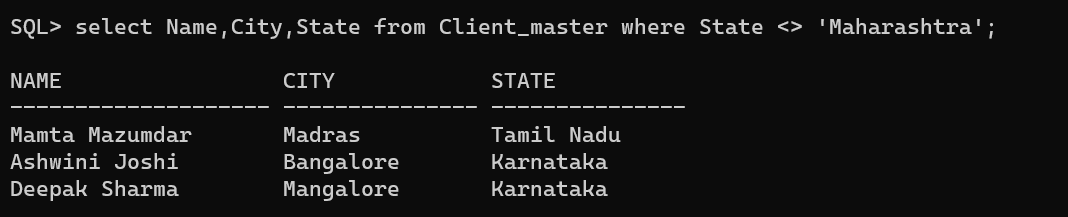
7) Find products whose selling price is greater than 2000 and less than or equal to 5000.



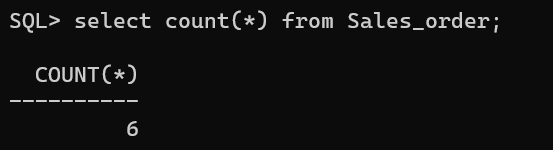
8) Find products whose selling price is more than 1500. Calculate a new selling price as original selling price \* .15. Rename the new column in the above query as new\_price.



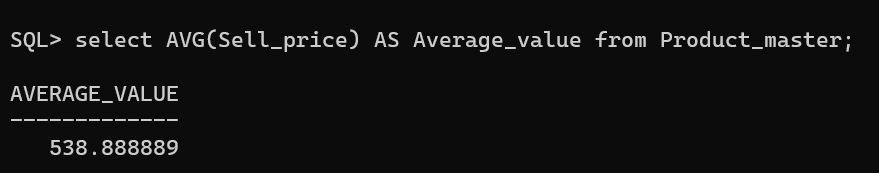
9) List the names, city and state of clients who are not in the state of 'Maharashtra'.



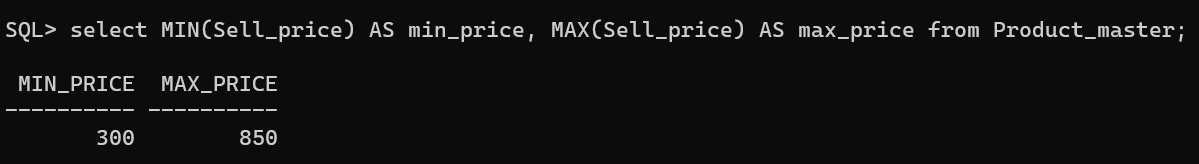
10) Count the total number of orders.



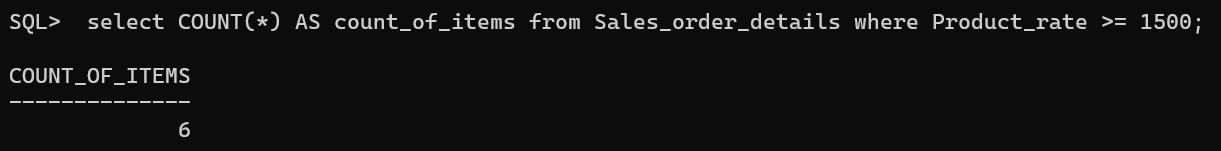
11) Calculate the average price of all the products.



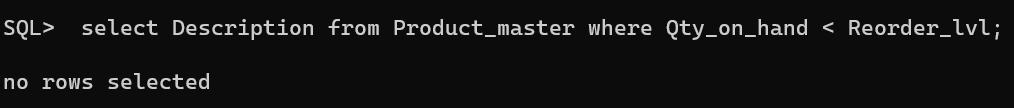
12) Determine the maximum and minimum product prices. Rename the output as max\_price and min\_price respectively.



13) Count the number of products having price greater than or equal to 1500.



14) Find all the products whose qty\_on\_hand is less than reorder level.



15)Display the order number and day on which clients placed their order

