```
SQL> create table salesman(salesman_id int primary key,name varchar(15),city varchar(15),commission int);


Table created.

SQL> insert into salesman(salesman_id,name,city,commission)values(&a,'&b','&c',&d);
Enter value for a: 1000
Enter value for b: john
Enter value for c: bangalore
Enter value for d: 25
old   1: insert into salesman(salesman_id,name,city,commission)values(&a,'&b','&c',&d)
new   1: insert into salesman(salesman_id,name,city,commission)values(1000,'john','bangalore',25)

1 row created.
```

```
SQL> create table customer(customer_id int primary key,cust_name varchar(15),city varchar(15),grade int,s
alesman_id int references salesman(salesman_id));

Table created.

SQL> insert into customer(customer_id,cust_name,city,grade,salesman_id)values(&a,'&b','&c',&d,&e);
Enter value for a: 10
Enter value for b: preethi
Enter value for c: bangalore
Enter value for d: 100
Enter value for e: 1000
old   1: insert into customer(customer_id,cust_name,city,grade,salesman_id)values(&a,'&b','&c',&d,&e)
new   1: insert into customer(customer_id,cust_name,city,grade,salesman_id)values(10,'preethi','bangalore
',100,1000)

1 row created.
```

```
SQL> create table orders(ord_no int primary key,purchase_amt int,ord_date varchar(20),cutomer_id int refe
rences customer(customer_id),salesman_id int references salesman(salesman_id));

Table created.
```

1. Count the customers with grades above Bangalore's Average.

SELECT grade, COUNT (DISTINCT customer_id) FROM customer GROUP BY grade HAVING grade > (SELECT AVG(grade) FROM customer WHERE city='bangalore');

```
SQL>  SELECT grade, COUNT (DISTINCT customer_id) FROM customer GROUP BY grade HAVING grade > (SELECT AVG(
grade) FROM customer WHERE city='bangalore');

     GRADE COUNT(DISTINCTCUSTOMER_ID)
---------- --------------------------
       400                          2
       300                          1
```

2.

SELECT SALESMAN_ID, NAME FROM SALESMAN A WHERE 1 < (SELECT COUNT (*) FROM CUSTOMER WHERE SALESMAN_ID=A.SALESMAN_ID);

```
SQL> SELECT SALESMAN_ID, NAME FROM SALESMAN A WHERE 1 < (SELECT COUNT (*) FROM CUSTOMER WHERE SALESMAN_ID
=A.SALESMAN_ID);

SALESMAN_ID NAME
----------- ---------------
       1000 john
       2000 ravi

SQL>
```

3.

SELECT SALESMAN.SALESMAN_ID, NAME, CUST_NAME, COMMISSION FROM SALESMAN, CUSTOMER1 WHERE SALESMAN.CITY = CUSTOMER1.CITY UNION SELECT SALESMAN_ID, NAME, 'NO MATCH', COMMISSION FROM SALESMAN WHERE NOT CITY = ANY (SELECT CITY FROM CUSTOMER1) ORDER BY 2 DESC;

```
SQL> SELECT SALESMAN.SALESMAN_ID, NAME, CUST_NAME, COMMISSION FROM SALESMAN, CUSTOMER WHERE SALESMAN.CITY
 = CUSTOMER.CITY UNION SELECT SALESMAN_ID, NAME, 'NO MATCH', COMMISSION FROM SALESMAN WHERE NOT CITY = AN
Y (SELECT CITY FROM CUSTOMER) ORDER BY 2 DESC;

SALESMAN_ID NAME            CUST_NAME       COMMISSION
----------- --------------- --------------- ----------
       4000 smith           NO MATCH                30
       2000 ravi            chethan                 20
       2000 ravi            mamatha                 20
       2000 ravi            preethi                 20
       3000 kumar           NO MATCH                15
       1000 john            chethan                 25
       1000 john            mamatha                 25
       1000 john            preethi                 25
       5000 harsha          NO MATCH                15

9 rows selected.
```

4.

```
SQL> CREATE VIEW ELITSALESMAN AS SELECT B.ORD_DATE, A.SALESMAN_ID, A.NAME FROM SALESMAN A, ORDERS B WHERE
 A.SALESMAN_ID = B.SALESMAN_ID AND B.PURCHASE_AMT=(SELECT MAX (PURCHASE_AMT) FROM ORDERS C WHERE C.ORD_DA
TE = B.ORD_DATE);

View created.

SQL> select * from ELITSALESMAN;

ORD_DATE             SALESMAN_ID NAME
-------------------- ----------- ---------------
04-may-17                   1000 john
20-jan-17                   2000 ravi
24-feb-17                   2000 ravi
13-apr-17                   3000 kumar
09-mar-17                   2000 ravi
```

5.

```
SQL> DELETE FROM SALESMAN WHERE SALESMAN_ID=1000;
DELETE FROM SALESMAN WHERE SALESMAN_ID=1000
*
ERROR at line 1:
ORA-02292: integrity constraint (C21MCA006.SYS_C0022362) violated - child
record found
```