LAB-9

Problem Statements:

1. Create following table Consider the following schema: Sailors (sid, sname,rating, age) Boats (bid, bname, color)Reserves (sid, bid, day(date))

2. Find all information of sailors who have reserved boat number 101.

3. Find the name of boat reserved by Bob.

4. Find the names of sailors who have reserved a red boat, and list in the order of age.

5. Find the names of sailors who have reserved at least one boat.

6. Find the ids and names of sailors who have reserved two different boats on the same day.

7. Find the ids of sailors who have reserved a red boat or a green boat.

1)

SQL> create table Sailors(sid number(6),sname varchar(20),rating number(2),age

number(3));Table created.

SQL> create table Boats(bid number(6),bname varchar(20),color

varchar(20));Table created.

SQL> create table Reserves(sid number(6),bid number(6),day

date);Table created.

SQL> desc Sailors;

 Name   Null? Type

 -- --------- -------------------------------

 SID   NUMBER(6)

 SNAME   VARCHAR2(20)

 RATING   NUMBER(2)

 AGE   NUMBER(3)

```
SQL> desc Boats;

 Name                          Null?  Type

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 BID                                   NUMBER(6)

 BNAME                                 VARCHAR2(20)

 COLOR                                 VARCHAR2(20)

SQL> desc Reserves;

 Name                          Null?  Type

 ------------------------------------- --------- -----------------------------

 SID                                   NUMBER(6)

 BID                                   NUMBER(6)

 DAY                                   DATE

SQL> insert into Sailors

values(11,'Max',7,30);1 row created.

SQL> insert into Sailors

values(12,'Rex',6,35);1 row created.

SQL> insert into Sailors

values(13,'Nix',4,28);1 row created.

SQL> insert into Sailors

values(14,'Bob',8,27);1 row created.

SQL> insert into Sailors

values(15,'Mark',9,37);1 row created.

SQL> insert into Sailors

values(16,'Ann',10,30);1 row created.

SQL> select * from Sailors;

   SID SNAME        RATING  AGE

----------- ----------------------- ----------- -----------

    11 Max            7     30

    12 Rex            6     35
```

```
    13 Nix            4     35

     14 Bob           8     27
     15 Mark          9     37

     16 Ann          10     30
```

6 rows selected.

SQL> insert into Boats

values(101,'Boat1','red');1 row created.

SQL> insert into Boats

values(102,'Boat2','blue');1 row created.

SQL> insert into Boats

values(103,'Boat3','green');1 row created.

SQL> insert into Boats

values(104,'Boat4','red');1 row created.

SQL> insert into Boats

values(105,'Boat5','brown');1 row created.

SQL> select * from Boats;

```
    BID BNAME        COLOR
------------ ----------------------- -----------------------
    101 Boat1         red
    102 Boat2         blue
    103 Boat3         green
    104 Boat4         red
    105 Boat5         brown
```
SQL> insert into Reserves values(11,101,'11-sep-

2020');1 row created.

SQL> insert into Reserves values(12,102,'01-oct-

2021');1 row created.

SQL> insert into Reserves values(13,102,'11-sep-

2020');1 row created.

SQL> insert into Reserves values(14,103,'09-sep-

2022');1 row created.

SQL> insert into Reserves values(15,104,'19-nov-

2022');1 row created.

SQL> insert into Reserves values(16,105,'23-nov-

2019');1 row created.

SQL> insert into Reserves values(11,105,'11-sep-

2020');1 row created.

SQL> insert into Reserves values(14,104,'09-sep-

2022');1 row created.

SQL> select * from
    Reserves;

    SID   BID DAY

----------- ------------ -----------

    11   101 11-SEP-20

    12   102 01-OCT-21

    13   102 11-SEP-20

    14   103 09-SEP-22

    15   104 19-NOV-22

    16   105 23-NOV-19

    11   105 11-SEP-20

    14   104 09-SEP-22

8 rows selected.

2)

SQL> --------Find all information of sailors who have reserves boat number 101.--------

SQL> select sailors.sid,sailors.sname,sailors.rating,sailors.age from Sailors,Reserves,Boats where boats.bid=101 andsailors.sid=reserves.sid and boats.bid=reserves.bid;

    SID SNAME   RATING AGE

----------- ----------------------- ----------- ------------

    11 Max   7   30

3)

SQL> --------Find the name of the boats reserved by Bob--------

SQL> select boats.bname from Sailors,Boats,Reserves where sailors.sid=reserves.sid and boats.bid=reserves.bid andsailors.sname='Bob';

BNAME

Boat

3

Boat

4

4)

SQL> -------Find the name of the sailors who have reserved a red boat order by age--------
SQL> select sailors.sname from Sailors , Boats,Reserves where boats.color='red'and sailors.sid=reserves.sid andboats.bid=reserves.bid order by sailors.age;

SNAME

Bob

Max

Mar

k

5)

SQL> --------Find the names of the sailors who have reserved at least one boat.--------

SQL> select distinct sailors.sname from Sailors,Reserves where sailors.sid=reserves.sid;SNAME

Bob

Mar

k

Ann

Rex

Nix

Max

6 rows selected.

6)

SQL> -------- Find id and name of sailors who have reserved two different boats.-------

SQL> select distinct sailors.sid,sailors.sname from Sailors,Reserves r1,Reserves r2 where sailors.sid=r1.sid and sailors.sid=r2.sid and r1.day=r2.day and r1.bid<>r2.bid;

     SID SNAME

----------- -----------------------

    11 Max

    14 Bob

7)
SQL> -------Find id of sailors who have reserved a red boat or a green boats.-------

SQL> select distinct sailors.sid from Sailors,Reserves,Boats where boats.color='red' or boats.color='green' and sailors.sid=reserves.sid and boats.bid=reserves.bid;

    SID

   14

   15

   11

   12

   13

   16

6 rows selected.