

Sailors(sid: integer, sname: string, rating: integer, age: real);
 Boats(bid: integer, bname: string, color: string);
 Reserves(sid: integer, bid: integer, day: date).

SQL> select * from sailors;

SID	SNAME	RATING	AGE
22	Dustin	7	45
29	Brutus	1	33
31	Lubber	8	55.5
32	Andy	8	25.5
58	Rusty	10	35
64	Horataio	7	35
71	Zorba	10	16
74	Horataio	9	35
85	Art	3	25.5
95	Bob	3	63.5

10 rows selected.

SQL> select * from reserves;

SID	BID	DAY
22	101	10-OCT-98
22	102	10-OCT-98
22	103	08-OCT-98
22	104	07-OCT-98
31	102	10-NOV-98
31	103	06-NOV-98
31	104	12-NOV-98
64	101	05-SEP-98
64	102	08-SEP-98
74	103	08-SEP-98

10 rows selected.

SQL> select * from boats;

BID	BNAME	COLOR
101	Interlake	blue
102	Interlake	red
103	Clipper	green
104	Marine	red

a) Names of sailors who have reserved red boats

```
select sname
from sailors s,boats b,reserves r
where s.sid=r.sid and b.bid=r.bid and b.color='red';
```

b) Find the names of the sailors who have reserved atleast one boat

Select sname from sailors

Where sid in (select sid from reserves)

C) Find the names of sailors who have reserved both a red and a green boat?

```
select s.sid,s.sname
  from sailors s,boats b,reserves r
 where s.sid=r.sid and b.bid=r.bid and b.color='red'
INTERSECT
select s.sid,s.sname
  from sailors s,boats b,reserves r
 where s.sid=r.sid and b.bid=r.bid and b.color='green';
```

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

```
SELECT R.sid
FROM Boats B, Reserves R
WHERE R.bid = B.bid AND B.color = 'red'
UNION
SELECT R2.sid
  FROM Boats B2, Reserves R2
WHERE R2.bid = B2.bid AND B2.color = 'green'
```

C) Find the names of sailors who have reserved all boats?

```
select s.sid,s.sname
  from sailors s
 where not exists (select b.bid
  from boats b
 where not exists (select r.bid
  from reserves r
 where r.bid=b.bid and r.sid=s.sid));
```