

Tables used in this note: **Sailors Reserves Boats**

Sailors(sid: integer, sname: string, rating: integer, age: real);

Boat(bid: integer, bname: string, bcolor: string);

Reserves(sid: integer, bid: integer, day: date).

Create the Tables:

```
1.      CREATE TABLE sailor ( sid integer not null,  
sname varchar(32),  
rating integer,  
age real,  
CONSTRAINT PK_sailors PRIMARY KEY (sid) );
```

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	Horatio	7	35
71	Zorba	10	16
74	Horatio	9	40
85	Art	3	25.5
95	Bob	3	63.5

```
2.      CREATE TABLE reserves ( sid integer not null,  
bid integer not null,  
day datetime not null,  
CONSTRAINT PK_reserves PRIMARY KEY (sid, bid, day),  
FOREIGN KEY (sid) REFERENCES sailors(sid),
```

FOREIGN KEY (bid) REFERENCES boats(bid));

sid	bid	day
22	101	1998-10-10
22	102	1998-10-10
22	103	1998-10-8
22	104	1998-10-7
31	102	1998-11-10
31	103	1998-11-6
31	104	1998-11-12
64	101	1998-9-5
64	102	1998-9-8
74	103	1998-9-8

3. CREATE TABLE Boat (Bid integer not null,

bname varchar(32),

bcolor varchar(32),

CONSTRAINT PK_Boat PRIMARY KEY (bid));

bid	bname	bcolor
101	Interlake	blue
102	Interlake	red
103	Clipper	green
104	Marine	red

1. Find all information of sailors who have reserved boat number 101.
2. Find names of sailors who have reserved boat number 101.
3. Find sid of sailors who have reserved red color boat.

4. Find names of sailors who have reserved red color boat.
5. Find names of sailors who have reserved red or green color boat.
6. Find names of sailors who have reserved red and green color boat.
7. Find colors of boat reserved by lubber.
8. Find names of sailors who have reserved red but not green color boat.
9. Find the names of sailors who have reserved at least one boat
10. Find the ids and names of sailors who have reserved two different boats on the same day
11. Find the names of sailors who have reserved at least two boats.
12. Find the names of sailors whose rating is better than some sailor called Horatio.
13. Find the names of sailors whose rating is better than every sailor called Horatio.
14. Find the name and the age of the youngest sailor.
15. Find the average age of sailors for each rating level.
16. Find the average age of sailors for each rating level that has at least two sailors.
17. Find the sailor id's of sailors with the highest rating.
18. Find the names of sailors who have reserved all boats whose name starts with "D"