

## Lab Assignment 8- Join and Sub Queries

Create the following tables and insert some tuples in these tables shown below. Where *sid* is the primary key for the Sailors table, *bid* is the primary key for the Boats table and *sid* and *bid* are the foreign keys for the Reserves table referencing to the Sailors and Boats table, respectively.

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

Boats(*bid*: integer, *bname*: string, *color*: string)

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

After inserting the records in these tables, the instances should look like as follows:

Sailors

<i>sid</i>	<i>sname</i>	<i>rating</i>	<i>age</i>
22	Dustin	7	45.0
29	Brutus	1	33.0
31	Lubber	8	55.5
32	Andy	8	25.5
58	Rusty	10	35.0
64	Horatio	7	35.0
71	Zorba	10	16.0
74	Horatio	9	35.0
85	Art	3	25.5
95	Bob	3	63.5

Reserves

<i>sid</i>	<i>bid</i>	<i>day</i>
22	101	10/10/98
22	102	10/10/98
22	103	10/8/98
22	104	10/7/98
31	102	11/10/98
31	103	11/6/98
31	104	11/12/98
64	101	9/5/98
64	102	9/8/98
74	103	9/8/98

Boats

<i>bid</i>	<i>bname</i>	<i>color</i>
101	Interlake	blue
102	Interlake	red
103	Clipper	green
104	Marine	red

Write SQL command using JOINS and/or Sub-queries for the following:

- Q1. Find the names of sailors who have reserved a red or a green boat.
- Q2. Find the names of sailors who have reserved both a red and a green boat.
- Q3. Find the names of sailors who have reserved boat 103
- Q4. Find the names of sailors who have reserved a red boat.
- Q5. Find the names of sailors who have NOT reserved a red boat.
- Q6. Find the names of sailors who have reserved at least one boat.
- Q7. Find sailors whose rating is better than some sailor called Horatio.
- Q8. Find sailors whose rating is better than every sailor called Horatio.
- Q9. Find the sailors with the highest rating.
- Q10. Find the names of sailors who have reserved all boats.