Lab Assignment 5

1. 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

sid	sname	rating	age
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

sid	bid	day
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

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

2. Write SQL command for the following:

i) Show the names and ages of all sailors.

ii) Show the details of the boats which are red and blue in color.

iii) Find the oldest and youngest sailors' age.

iv) Find the ages of sailors whose name begins and ends with B and has at leastthree characters.

v) Show the average rating of the sailors.

vi) Find all sailors with a rating above 7.

vii) Find the number of boats reserved by the sailor namedHoratio.

viii) Find the colors of boats reserved by Lubber.

ix) Show the details of the sailors who have reserved the boat with bid 102.

x) Find the sid of sailors who have reserved green boats.

xi) Find the names of sailors who have reserved boat number 103.

xii) Find the sids and names of sailors who have reserved a red boat.

xiii) Find the names of the sailors who have reserved a green or a blue boat.

xiv) Find the names of sailors who have reserved both a red and a green boat.

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