

EE436L: Database Engineering

Department of Electrical Engineering
University of Engineering and Technology Lahore 2020
Instructor: Mr. Umer Shahid

Name _____
Registration Number _____

Title: WRITING BASIC SQL QUERIES

Consider the following database schema for this lab:

Sailor (sid, sname, rating, age)

Boat (bid, bname, color)

Reserve (sid, bid, day)

Example instances of sailor, reserve, and boat are given on next page. Write down the queries for executing the following examples in Relational Algebra notation, as well as in SQL notation on your SQL Workbench. Please remember that your queries should work in general for all valid instances.

1. Find the names and ages of all sailors.
2. Find all sailors with a rating above 7.
3. Find the names of sailors who have reserved boat number 103.
4. Find the sids of sailors who have reserved a red boat.
5. Find the names of sailors who have reserved a red boat.
6. Find the colors of boats reserved by Lubber.
7. Find the names of sailors who have reserved at least one boat.
8. Find the ages of sailors whose name begins and ends with B and has at least three characters.
9. Find the names of sailors who have reserved a red or a green boat.
10. Find all sids of sailors who have a rating of 10 or reserved boat 104.

Sailor

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

Reserve

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

Boat

bid	bname	Color
101	Interlake	Blue
102	Interlake	Red
103	Clipper	Green
104	Marine	Red

For better understanding, instead of executing all queries on the workbench, try writing them on a piece of paper first.