

CS 5012: Sailors RA – In-class Activity

You are given the following schema and tables from a Sailors Database. Respond to each of the following eight questions, by including the RA query that returns the requested data from the DB.

Note: Feel free to use the rename operation (ρ) to rename the resulting relations, so they can be used/referenced in other operations within the same question.

Sailors DB Schema

Boats (bid, bname, color)

Sailors (sid, sname, rating, age)

Reserves (sid, bid, day)

Sailors DB Tables

Boats

bid	bname	color
101	Minnow	Blue
102	Voyager	Red
103	Marlin	Yellow
104	Happy	Red
105	Sinker	Green

Sailors

sid	sname	rating	age
22	Yuppy	9	35.0
31	Lubber	8	55.5
44	Guppy	5	35.0
48	Ole Red	8	92.3
58	Rusty	10	40.0

Reserves

sid	bid	day
22	101	5-Jun-03
22	104	15-Jun-03
44	102	5-Jun-03
48	105	14-Jun-03
58	103	7-Jun-03

Questions for the Sailors Database

1. Find the names of sailors who have reserved boat 103.
2. Find the colors of the boats reserved by Yuppy.
3. Find the names of sailors who have reserved a red and a green boat.
4. Find the names of the sailors who have reserved all the boats.
5. Find the names of sailors who have reserved a red boat.
6. Find the names of the sailors who have reserved a red or green boat.
7. Find the names of the sailors who have not reserved a boat.
8. Find the sid's of the sailors who have reserved a boat whose name begins with the letter 'M'. (the boat's name, not the sailor's)