

# COMP 3311: Database Management Systems

## Lecture 6 Exercises Relational Algebra

Sailor(sailorId, sName, rating, age)

Reserves(sailorId, boatId, rDate)

Boat(boatId, bName, color)

**Exercise 1:** Find the ids of sailors who have reserved boat 103.

**Exercise 2:** Find the names of sailors who have reserved boat 103.

**Exercise 3:** Find the names of sailors who have reserved a red boat.

Name: (1) \_\_\_\_\_ / \_\_\_\_\_ Student#: (1) \_\_\_\_\_ Date: \_\_\_\_\_  
Last/Family (PRINT) Given/First (PRINT)

Name: (2) \_\_\_\_\_ / \_\_\_\_\_ Student#: (2) \_\_\_\_\_  
Last/Family (PRINT) Given/First (PRINT)

**NOTE: You are highly encouraged to do this exercise with a partner.**

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Sailor(sailorId, sName, rating, age)      Reserves(sailorId, boatId, rDate)      Boat(boatId, bName, color)

**Exercise 4:** Find the names of sailors who have reserved either a red or a green boat.

**Exercise 5:** Find the names of sailors who have reserved both a red and a green boat.

**Exercise 6:** Find the ids of sailors who have made at least two reservations on the same date.  
[Hint: You need to join Reserves with itself.]

You must upload this completed exercise sheet to Canvas by 11:00 p.m. today.