**9.3 Module Exercise: Sailors Activity**

## **H. Diana McSpadden (hdm5s)**

**Directions:** Complete Sailors Examples 1–3 in the Group BY-Having-Order by Exs resource. Please complete this activity prior to the live session, if possible.

### **Sailors Example 1:**

**Total number of unique sailors who has reserved each boat (ordered in descending order), displaying the count, boat name and boat id?**

### SELECT COUNT(DISTINCT(sid)) AS sCount, bname, Reserves.bid

### FROM Reserves

### JOIN Boats ON Reserves.bid = Boats.bid

### GROUP BY Reserves.bid

### ORDER BY COUNT(DISTINCT(sid)) DESC

### **Sailors Example 2:**

**Average age of sailors who have reserved each boat (using bname), showing boat name, bid, and the average age. Order results by bid.**

### SELECT bname, Reserves.bid, AVG(Sailors.age) AS avg\_age

### FROM Reserves

### JOIN Boats ON Reserves.bid = Boats.bid

### JOIN Sailors ON Reserves.sid = Sailors.sid

### GROUP BY Reserves.bid

### ORDER BY Reserves.bid DESC

### **Sailors Example 3:**

In addition, **only show bnames where the average age of sailors who have reserved that boat is > 35 years old**.

SELECT bname, Reserves.bid, AVG(Sailors.age) AS avg\_age

FROM Reserves

JOIN Boats ON Reserves.bid = Boats.bid

JOIN Sailors ON Reserves.sid = Sailors.sid

GROUP BY Reserves.bid

HAVING AVG(Sailors.age) > 35

ORDER BY Reserves.bid DESC

**OR ANOTHER WAY …**

SELECT bname, bid, avg\_age

FROM

(SELECT bname, Reserves.bid, AVG(Sailors.age) AS avg\_age

FROM Reserves

JOIN Boats ON Reserves.bid = Boats.bid

JOIN Sailors ON Reserves.sid = Sailors.sid

GROUP BY Reserves.bid

ORDER BY Reserves.bid DESC)

WHERE avg\_age > 35