

SQL Test 2

Bluewater Marina Tables

m\_marinas \* m\_marina\_slips \* m\_owners \* m\_previous\_owners \* m\_service\_categories  
\* m\_service\_requests

\*\* JOINS \*\*

1. Return marina name, slip length, boat name, and rental fee. Sort slip length within marina name.

MARINA_NAME	SLIP_LENGTH	BOAT_NAME	RENTAL_FEE
-----	-----	-----	-----
Bluewater Central	25	Listy	2000.00
Bluewater Central	25	Bravo	1800.00
Bluewater Central	25	Chinook	1800.00
Bluewater Central	30	Mermaid	2500.00
Bluewater Central	40	Axxon II	4200.00
Bluewater Central	40	Karvel	4200.75
Bluewater East	30	Gypsy	2400.00
Bluewater East	30	Anderson III	2600.00
Bluewater East	40	Our Toy	3800.25
Bluewater East	40	Escape	3799.40
Bluewater East	40	Anderson II	3800.00
Bluewater West	25	[NULL]	1800.00
Bluewater West	30	Freedom	2500.00
Bluewater West	40	My Get Away	4200.75

2. Return marina name, concatenated owner name, and boat name for all owners from the city of Bowton that rent a boat slip with a length of 40. Sort owner within marina name.

MARINA_NAME	OWNER	BOAT_NAME
-----	-----	-----
Bluewater East	Kelly, Alyssa	Escape
Bluewater West	Manis, Jake	My Get Away

3. Return slip code, boat name, owner's last name, category description, and estimated hours for each service request in category 2. Sort by slip code.

SLIP_CODE	BOAT_NAME	LAST_NAME	CATEGORY_DESCRIPTION	EST_HOURS
-----	-----	-----	-----	-----
A1	Anderson II	Anderson	Engine repair	2.00
B1	Bravo	Adney	Engine repair	4.00
B1	Bravo	Adney	Engine repair	2.00
B3	Listy	Smeltz	Engine repair	5.00

4. Create a service request report. Return slip code, boat name, estimated hours, spent hours, category id, and category description for each boat slip in marina 2. Include ALL boat slips regardless if the boat currently has any service requests. Sort by slip code.

SLIP_CODE	BOAT_NAME	EST_HOURS	SPENT_HOURS	CATEGORY_ID	CATEGORY_DESCRIPTION
-----	-----	-----	-----	-----	-----
B1	Bravo	4.00	1.00	2	Engine repair
B1	Bravo	2.00	0.00	2	Engine repair
B2	Chinook	8.00	0.00	6	Canvas installation
B2	Chinook	6.00	0.00	5	Fiberglass repair
B3	Listy	5.00	2.00	2	Engine repair
B4	Mermaid				
B5	Axxon II				
B6	Karvel	2.50	0.00	4	Electrical systems
B6	Karvel	8.00	3.00	7	Canvas repair

5. Return marina id, slip code, boat name, and owner. Return all marina slips including those not rented. For slips not rented, display "Slip not rented" in the boat name column. Sort by slip code.

MARINA_ID	SLIP_CODE	BOAT_NAME	OWNER_NAME
-----	-----	-----	-----
1	A1	Anderson II	Anderson Bill
1	A2	Our Toy	Elend Sandy and Bill
1	A3	Escape	Kelly Alyssa
1	A4	Gypsy	Juarez Maria
1	A5	Anderson III	Anderson Bill
2	B1	Bravo	Adney Bruce and Jean
2	B2	Chinook	Feenstra Daniel
2	B3	Listy	Smeltz Becky and Dave
2	B4	Mermaid	Blake Mary
2	B5	Axxon II	Norton Peter
2	B6	Karvel	Trent Ashton
3	C1	Freedom	Arnold James
3	C2	Slip not rented	
3	C3	My Get Away	Manis Jake

6. Return marina id, slip length, count, and yearly revenue (rental fees) the marina receives each year based on the length of the slip for each marina. Also, include a count of the number of marina slips for each slip length. Format yearly revenue with commas. Sort slip length within marina id. Use GROUP BY.

MARINA_ID	SLIP_LENGTH	COUNT	YEARLY_REVENUE
-----	-----	-----	-----
1	30	2	5,000.00
1	40	3	11,399.65
2	25	3	5,600.00
2	30	1	2,500.00
2	40	2	8,400.75
3	25	1	1,800.00
3	30	1	2,500.00
3	40	1	4,200.75

7. Return marina id, slip length, count, and yearly revenue (rental fees) the marina receives each year based on the length of the slip. Only include marinas 1 and 3. Also, include a count of the number of slips for each slip length. Only return rows where the yearly rental is equal to or greater than 2500.00. Format yearly revenue with commas. Sort slip length within marina id. Use GROUP BY/HAVING.

MARINA_ID	SLIP_LENGTH	COUNT	YEARLY_REVENUE
-----	-----	-----	-----
1	30	2	5,000.00
1	40	3	11,399.65
3	30	1	2,500.00
3	40	1	4,200.75

**\*\* VIEWS \*\***

8. Create a VIEW called T2V that returns owner’s city, concatenated owner name, boat name, slip length, and rental fee for boats in marina 2 with a rental fee greater than 1800.00. Display the data in T2V to verify.

**NOTE: Make your schema the default schema so the view is stored in your schema**  
**Qualify the table name with LCPUBLIC so it is found – LCPUBLIC.B\_CUSTOMERS**

**SELECT \* FROM T2V;**

CITY	OWNER	BOAT_NAME	SLIP_LENGTH	RENTAL_FEE
-----	-----	-----	-----	-----
Glander Bay	Smeltz, Becky and Dave	Listy	25	2000.00
Lewiston	Norton, Peter	Axxon II	40	4200.00
Bowton	Blake, Mary	Mermaid	30	2500.00
Bay Shores	Trent, Ashton	Karvel	40	4200.75

9. Use the T2V view to return owner name, boat name, and rental fee where slip length is greater than 25. Sort by owner name descending.

**Note: This query must be executed from your schema because that is where the view is stored. It cannot be executed from LCPUBLIC because the view will not be found. The table will be found because it has been qualified in the view.**

OWNER	BOAT_NAME	RENTAL_FEE
-----	-----	-----
Trent, Ashton	Karvel	4200.75
Norton, Peter	Axxon II	4200.00
Blake, Mary	Mermaid	2500.00

10. Write an SQL statement that the DBMS would need to access the base tables directly to return the same result set as the previous question. Do not access the T2V view. Instead, access the base tables directly.

**Note: This query can be executed from your schema or LCPUBLIC. It has to be executed from LCPUBLIC if the table is not qualified. It can be executed from your schema if the table is qualified as LCPUBLIC.B\_CUSTOMERS.**

OWNER	BOAT_NAME	RENTAL_FEE
-----	-----	-----
Trent, Ashton	Karvel	4200.75
Norton, Peter	Axxon II	4200.00
Blake, Mary	Mermaid	2500.00

**\*\* Subqueries \*\***

11. Return owner name, owner city, marina id, slip code, and rental fee where rental fee is greater than the average of all rental fees at the marinas. Sort by owner name.				
OWNER_NAME	CITY	MARINA_ID	SLIP_CODE	RENTAL_FEE
-----	-----	-----	-----	-----
Anderson, Bill	Glander Bay	1	A1	3800.00
Elend, Sandy and Bill	Rivard	1	A2	3800.25
Kelly, Alyssa	Bowton	1	A3	3799.40
Manis, Jake	Bowton	3	C3	4200.75
Norton, Peter	Lewiston	2	B5	4200.00
Trent, Ashton	Bay Shores	2	B6	4200.75

12. Return marina id, slip code, concatenated owner name, owner city, and rental where rental fee is greater than the average rental fee for the marina in which the boat is stored. Sort by slip code within marina id. Hint: Correlated subquery.				
MARINA_ID	SLIP_CODE	OWNER_NAME	CITY	RENTAL_FEE
-----	-----	-----	-----	-----
1	A1	Bill Anderson	Glander Bay	3800.00
1	A2	Sandy and Bill Elend	Rivard	3800.25
1	A3	Alyssa Kelly	Bowton	3799.40
2	B5	Peter Norton	Lewiston	4200.00
2	B6	Ashton Trent	Bay Shores	4200.75
3	C3	Jake Manis	Bowton	4200.75