

DASC 5333 Database Systems for Data Science

CSCI 4333 Design of Database Systems

Spring 2025

Homework #4 More SQL

Use the relation schema for the Clear Lake Youth Swimming Team Management System (SWIM) project as the basis of this homework. Please see swim: <https://dcm.uhcl.edu/yue/courses/joinDB/Spring2025/>.

Provide the SQL statements for the following queries. Please pay attention to the column names and formats. The orders of the results are not important unless explicitly stated otherwise.

(1) List all swimmer names and their primary caretaker names in the following format.

```
+-----+-----+
| swimmer | Primary Caretaker |
+-----+-----+
| Bobby Khan | Azalea Khan |
| Billy Khan | Azalea Khan |
| Nina Khan | Joseph Khan |
| Clara Johnson | Katie Johnson |
| Philip Johnson | Elizabeth Johnson |
| Joe Fen | Katie Johnson |
+-----+-----+
6 rows in set
```

(2) List the names of the swimmers with current level (i.e. currentLevelId) is Yellow or above. Note that the level of Yellow has a LevelId of 3. However, you should not use 3 in your query. You should use "Yellow".

```
+-----+-----+-----+
| LName | FName | currentLevelId |
+-----+-----+-----+
| Khan | Bobby | 3 |
| Johnson | Clara | 3 |
| Fen | Joe | 5 |
+-----+-----+-----+
3 rows in set
```

(3) List the swimmer names (in a single column) that have participated in an event of a meet in a venue with a phone with an area code of 713 in the following format.

```
+-----+-----+-----+-----+
| Swimmer | Meet | Venue | phone |
+-----+-----+-----+-----+
| Clara Johnson | Shell Trial | CLHS | 713-126-4544 |
| Billy Khan | Shell Trial | CLHS | 713-126-4544 |
| Nina Khan | Shell Trial | CLHS | 713-126-4544 |
| Philip Johnson | Shell Trial | CLHS | 713-126-4544 |
| Bobby Khan | Shell Trial | CLHS | 713-126-4544 |
| Joe Fen | Clear Lake Contest | CLHS | 713-126-4544 |
| Bobby Khan | Clear Lake Contest | CLHS | 713-126-4544 |
```

(4) List all swimmers (their names, levels AND event titles) who have participated in events in the meet 'UHCL Open' in the following manners.

Swimmer in UHCL Open	level	event
Billy Khan	Blue	50M Butterfly
Nina Khan	Blue	50M Butterfly
Philip Johnson	Blue	50M Butterfly
Nina Khan	Blue	100M Freestyle
Billy Khan	Blue	100M Freestyle
Philip Johnson	Blue	100M Freestyle
Bobby Khan	Yellow	100M Butterfly
Clara Johnson	Yellow	100M Butterfly
Bobby Khan	Yellow	200M Freestyle

9 rows in set

(5) List all swimmers with their primary caretakers and their other caretakers in the following manner. Order the result by last names and then first names of the swimmers.

Swimmer	Primary Caretaker	Other Caretakers
Joe Fen	Katie Johnson	
Clara Johnson	Katie Johnson	Elizabeth Johnson
Philip Johnson	Elizabeth Johnson	
Billy Khan	Azalea Khan	Jim Khan
Bobby Khan	Azalea Khan	Jim Khan; Joseph Khan
Nina Khan	Joseph Khan	Jim Khan; Azalea Khan

6 rows in set

(6) List the swimmers (names and their number of participated events) who have participated in two or more events in 'UHCL Open' in the following format.

Swimmer	Number of Events in UHCL Open
Billy Khan	2
Bobby Khan	2
Nina Khan	2
Philip Johnson	2

4 rows in set

(7) List the name of the swimmers who have participated in event 3 but not event 4.

swimmer
Clara Johnson

1 row in set

(8) List the titles of the events with the least number of participants in the following format.

```
+-----+-----+
| Least popular event          | number of swimmers |
+-----+-----+
| UHCL Open: 200M Freestyle    |          1 |
| Clear Lake Contest: 200M Backstroke |          1 |
| Clear Lake Contest: 50M Breaststroke |          1 |
+-----+-----+
3 rows in set
```

Submit h4.sql.txt through Canvas. It must be done in a text format. The file should be executable by the TA using the source command or using copying and pasting into a SQL client.