

## Database Drill: Checkpoint

In the following challenges, we will be slowly moving away from SQL world and venturing into Rubyland for databases.

While we need to learn up various code syntax, it may be easy to get bogged down with code and unknowingly rush our learning. So let's take a short breather here and reflect on what we have been learning about databases thus far.

## Objectives

### Reinforce Understanding

Go through the following questions and answer them with your own words. Write your answers in the given file.

Do research if necessary but avoid copy-and-pasting information. Explain the concepts in your own words so that you can internalize your understand. Feel free to include the links of the references that you found so that you can refer to them next time.

####Questions:

1. What is a relational database?
2. Why do we need a database when we build a web app?
3. What are the different types of SQL databases? Name [at least three](#). What is the SQL database that you have been doing for your challenges so far? Why do you think we use this particular database for our current exercises?
4. List down 3 [general data types](#) used in a database field and their descriptions. Are they the same for different databases?
5. Explain what is a one-to-one relationship, one-to-many relationship, and many-to-many relationship.
6. In SQL, what is the naming convention for a table name?
7. What is a primary key and why is it important to have one ?
8. What is a foreign key and when is it needed?
9. Write down what you understand about the various [SQL constraints](#).
10. Explain the difference between NULL and NOT NULL.

Once you are done, proceed to the next challenge. Back to coding! :)