

What are **two** benefits of storing this data in MongoDB with JSON over a relational database management system such as Postgres? Please reference specific examples from the **business** collection to back up your claims. - Format your answer as follows: 1. Benefit #1, Example #1. 2. Benefit #2, Example #2.

Limit each benefit to 1 sentence and each example to 1 sentence for a total of at most four sentences.

1. The first benefit of using MongoDB is that we do not have to have a predefined schema so we are flexible in terms of adding different columns of data, and different fields. The example we can take from the script above is that when observing business parking, we notice that there is a lot of variety in terms of the options available, which would normally may be constrained in a Postgres setting.
2. The second benefit of using MongoDB is the difference of orders that the data can have, that is to say that it can handle complex data very well, since it is not strict with schema. Take for instance the different placements of attributes of a restaurant HasTV is not in the same position in the returned collection, this could also be said about other fields such GoodForMeal and RestaurantsAttire.

0.0.1 Question 2d

In the last question, you performed equivalent left joins in both Postgres and Mongo. Now, examine their query plans, paying special attention to `executionTimeMillis`. Which join was faster? What gives that database system you chose an advantage over the other? Keep your response to at most three sentences.

Postgres is faster in this case since the execution time is faster than Mongo. Postgres is better than MongoDB because Postgres has an internal structure that has a structure that looks to optimize resources and times thus it has options for an optimal time, as opposed to MongoDB which doesn't have that option.

What do you notice about how the columns of `business_df` are constructed? How are values that are not found in every document handled in the pandas dataframe? Compare and contrast this dataframe representation with the document representation we saw with Mongo. Keep your response to at most two sentences.

I noticed that the columns are in a manner where all the possible columns that can exist do exist. This means if a certain attribute or values only has that attribute then the rest of the entries have NAN's, which is how the pandas dataframe handles it as seen above.

