Consider your favorite website/application (you can also take CareerFoundry). Think about the various data that your favorite website/application collects. Write down how analyzing the collected data could help the website/application.

The website X collects interaction data to display detailed analytics under a user's post, like post engagements, detail expands, and link clicks. This feature is a benefit to the platform because it helps advertisers and users trying to grow their audience by showing them which type of posts attract the most attention. It's also important for calculating the revenue that some users can make from post engagement.

Tracking engagement details is also beneficial to limiting spam, because it makes it easier to notice suspicious activity coming from certain accounts, like frequency of posting or a brand new account getting an unusual amount of reposts and replies in a short time period. X does not seem to take advantage of this ability though, which is disheartening.

Read the Django official documentation on QuerySet API. Note down the different ways in which you can evaluate a QuerySet.

You can pickle a QuerySet in order to cache it for later instead of reading it from the database again. It's not the best for memory though and will not update if the database information changes.

You can call repr() on a QuerySet to show a simple string that represents the object, like a name and short description.

len() on a QuerySet returns the length of the result list.

You can use or/and/if statements or bool() to cause a query to be executed and will return true if there is at least one result.

In the Exercise, you converted your QuerySet to DataFrame. Now do some research on the advantages and disadvantages of QuerySet and DataFrame, and explain the ways in which DataFrame is better for data processing.

DataFrame is better for data processing because it has more functionalities specifically for data analysis like filtering, aggregation, merging, transformation, and visualization.

QuerySets just represent data from a relational database but have a few functions like filtering, ordering, and joining databases, but it is not very flexible as it can only interact

with relational databases and could require more unnecessary SQL queries than DataFrame.