Please read: [15 things you should know about Dictionaries in Python | by Amanda Iglesias Moreno | Towards Data ScienceLinks to an external site.](https://towardsdatascience.com/15-things-you-should-know-about-dictionaries-in-python-44c55e75405c). List three things that you learned in addition to what we learned in class and how they could be used in practice. Why do you think dictionaries are such an important data structure?

Three additional info about dictionaries in Python that I have learned from reading the article by Amanda Iglesias Moreno are:

1. Copying a dictionary. It is important to understand how to use this command because when ‘shallow’ copying (dict\_name.copy command) a dictionary and if we change value(s) inside a list or from a list type, this change will impact the original dictionary also. To avoid this change, one needs to use a deep copy command (copy.deepcopy.()), such that the original dictionary doesn’t change, regardless of an object type.
2. Nested dictionaries. Dictionaries can be nested with dictionaries. This will be useful when working with multiple dictionaries from different sources, such that they can be linked and worked together simultaneously as a single master dictionary. I can see this is commonly used when different dictionaries are created by a different team member and later combine into a single dictionary project for end users.
3. Creating a Pandas DataFrame from a dictionary. This command will help clean up the data and handle it in a dataframe type or a 2D-tabular which is a very organized and easier way to work, especially when a dictionary contains large data and multiple objects. The functions in Pandas can be used in this type of dataframe as well.

Dictionary is a powerful data structure, especially when working with mulitple unique key:value pairs, keeping large data organized and at the same easily accessed and modified as needed. Compared to working with other data structures, such as lists, the data in a dictionary is more organized, increasing the efficiency of analyzing data when fetching and editing an object [1]. In Python version 3.7 or later, dictionaries are ordered and that ordered will not change [2].

[1] <https://favtutor.com/blogs/list-vs-dictionary#:~:text=The%20list%20is%20an%20ordered,than%20a%20list%20in%20Python>.

[2] <https://www.w3schools.com/python/python_dictionaries.asp#:~:text=Dictionaries%20are%20used%20to%20store,and%20earlier%2C%20dictionaries%20are%20unordered>.