What are Data Structures?

In this section, we'll learn about the purpose of data structures and how to use them in Python.

Definition

> A data structure is a way of storing and organizing data according to a certain format or *structure*.

We can find real-life examples of data structures as well.

There are so many lists online about all sorts of topics. Another example is the use of tables to display schedules. A novel stores and organizes text in paragraphs.

All these mediums store data and allow us to manipulate or access it in a certain way.

Data structures are a crucial part of computer programming. Since we frequently deal with data manipulation, it is of paramount importance to organize it in an efficient and meaningful way.

Data Structures in Python

Python is equipped with several built-in data structures to help us efficiently handle large amounts of data.

We've already been dealing with a data structure for quite some time now. Yes, the list was a data structure all along!

The four primary built-in data structures offered in Python3 are:

- **List**

- **Tuple**

- **Dictionary**

- **Set**

In the coming lessons, we'll examine them one by one.

Furthermore, we can even create our own custom data structures, but that's a story for another time.

Let's start our discussion off with the **list** data structure.