# Data Structures

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This is a C++ course in data structures. But data structures is not a C++-specific topic. It is a language independent topic. Some languages, like C++ and Java, have extensive libraries to support programming with data structures. Some languages, like Python and PHP, have support for data structures built right in. Some languages, like VBScript and Fortran, don't really have a lot except for arrays. But to be sure, no matter what language(s) you program in in the future, you'll probably need data structures.

With more than one to choose from, you'll have to know which data structure is the right one for your application and how to apply it, whether there is support for it in the language or not. That's what this course is all about.

In the simplest sense, a data structure is something a programmer can use to store and retrieve data. Two easy ways to think of a data structure are arrays and objects.

Arrays let the programmer store data at numbered indexed positions, and retrieve data by their index. Objects let the programmer store data by name and retrieve it by that name. Both have limits -- the array by how many indexed positions there are, and objects by how many named "attributes" there are.

In this course on data structures you will learn about other data structures besides these.