

Chapter 10: Managing memory and low-level data structures

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We will in this chapter be introduced to *low-level* programming that resembles how the language itself is built. Using low-level techniques is one skill that is very useful in C++.

An *array* is a kind of container, similar to a vector but less powerful. A *pointer* is a kind of random-access iterator that is essential for accessing elements of arrays, and has other uses as well.

A pointer can be said to be the *address* of an object. Every distinct object has a unique address, which denotes the part of the computer's memory that contains the object. If `x` is an object, then `&x` is the address of that object, and if `p` is the address of an object, then `*p` is the object itself. The `&` is an *address operator* and the `*` is a *dereference operator*.