

Data types are simply the classifications we use to identify different types of data. They tell the computer how we want to use the data, and what type of data we are working with. In C++, there are five main data types:

1. Integers
2. Floating-point numbers
3. Characters
4. Strings
5. Arrays

Integers are whole numbers that can be either positive or negative. We use the `int` data type to represent them in C++. For example:

```
int x = 5;  
int y = -10;
```

Floating-point numbers are numbers that have a decimal point. They can also be either positive or negative. We use the `float` data type to represent them in C++. For example:

```
float x = 5.5;  
float y = -10.1;
```

Characters are single letters or symbols. We use the `char` data type to represent them in C++. For example:

```
char x = 'a';  
char y = '+';
```

Strings are series of characters that are put together to form words or phrases. We use the `string` data type to represent them in C++. For example:

```
string x = "Hello";  
string y = "Goodbye";
```

Arrays are groups of data that are all of the same type. We use the array data type to represent them in C++. For example:

```
int x[5] = {1,2,3,4,5};  
float y[3] = {1.5, 2.5, 3.5};  
char z[6] = {'H', 'e', 'l', 'l', 'o', '!'};
```

Each data type has different functions and operations that can be performed on it. For example, we can do arithmetic operations on integers and floating-point numbers, but not on characters or strings. We'll learn more about how to use data types and the different operations that can be performed on them in future lessons.