

Primitive Data Types

After learning about variable initialization and assignment, you should be aware that data types are serious business. They can determine the success or failure of your project. Therefore, you should know them extremely well. This document should serve as a quick reference guide for the data types we will be using most often in this class. Research each of the terms below and write their definitions in the boxes below

int : An int value is an integer from -2,147,483,648 to 2,147,483,647. This is usually the default data type for integer values; the default value is 0.

Double: A double value is usually the default data type for decimal values; the default value is 0.0d. It is a double-precision floating point, so it takes more memory than a float.

Boolean: Used for simple functions in which there are only 2 possible answers, boolean has only two possible values: true and false. The default value is false.

float: A float value, like a double, can be used for decimal values. It is a single-precision floating point, so it take less memory than a double but is less precise. It is usually used to save memory in large arrays of floating point numbers. The default value is 0.0f

char: A char value is a single Unicode character, ranging from 'u0000' (0) to 'uffff' (65,535). It is used to store any character.

short: A short value is an integer from -32,768 to 32,767. It is two times smaller than an int, so it is often used to save memory. The default value is 0.

long: A long value is an integer from -9,223,372,036,854,775,808 to 9,223,372,036,854,775,807. It is used when the range of int is insufficient. The default value is 0L.