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 :

Int = Integers in real life algebra. Whole numbers, numbers that don't have decimals, parts, etc.

Double:

Double = Numbers with decimals of all sizes. Covers the entire spectrum of numbers that we will need during class. A double could potentially hold more information than a float (max of 64 bits)

boolean:

Boolean = True/False. Often indicated by 0 for True and 1 for False.

float:

Float = Numbers with decimals in them. Max of 32 bits.

char:

Char = A single character, that is a letter, digit, punctuation mark, tab, space, etc. Escape sequences are necessary for some characters.

short:

Short = A short is a 2's complement integer of length 16 bits (the first digit is used to indicate the sign, the following 15 digits determine the value of the number). The numbers range from -2^15+1 to 2^15-1.

long:

Long = A long is a 2’s complement integer of length 64 bits (the first digit is used to indicate the sign, the following 63 digits determine the value of the number). The numbers range from -2^63+1 to 2^63-1.