**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

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| **int :**   * Integers in Java represented by the int database; * same integers as in Algebra; * no decimals or fractions |
| **Double:**   * Used to hold decimal numbers * Will hold any real number that you need in this course |
| **boolean:**   * Can only hold the values of true or false. * Used as an off and on switch in Java programs |
| **float:**   * Long data type is a 64-bit signed two's complement integer. * Variable with a fractional value * when a wider range than int is needed, this is used |
| **char:**   * har data type is a single 16-bit Unicode character. * Char data type is used to store any character. * minimum value of '\u0000' (or 0) and a maximum value of '\uffff' |
| **short:**   * 16-bit signed two's complement integer. * Used to save memory in comparison with the int * a minimum value of -32,768 and a maximum value of 32,767 (inclusive) |
| **long:**   * a 64-bit two's complement integer. * The signed long has a minimum value of -263 and a maximum value of 263-1. * Wider range of values than those provided by int |