

## **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 is generally used as the default data type for integral values unless there is a concern about memory. The default value is 0.  
Ex) int a=100000, int b= -200000**

**double: In the most simple terms, the double datatype is used to hold decimal numbers. It will hold any real number (including decimals).**

**Boolean: Boolean data type represents one bit of information. Two possible values: true and false. It is used as an on/off switch in Java programs.**

**float: Float is mainly used to save memory in large arrays of floating point numbers. Float data type is never used for precise values such as currency.**

**char: it is used to store any character. Data type is a single 16 bit Unicode character. Ex) char letterA="A"**

**short: 16-bit signed two's complement integer. Short data type can also be used to save memory as byte data type. A short is 2 times smaller than an int. Default value is 0.**

**long:** long data type is a 64-bit type. This is used when a wider range than int is needed.