**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 : 4 bytes - doesn’t recognize non-integers**  -2,147,483,648 to 2,147,483, 647 |
| **Double: 8 bytes - double-precision 64-bit IEEE 754 floating point**  approximately ±1.79769313486231570E+308  (15 significant decimal digits) |
| **Boolean: - true or false** |
| **float: 4 bytes - Like a double, but not as precise**  approximately ±3.40282347E+38F  (6-7 significant decimal digits)  Java implements IEEE 754 standard |
| **char: 2 bytes - a single character**  0 to 65536 |
| **short: 2 bytes - 16 bit data type, can use a short to save memory in large arrays in situations where the memory savings actually matters**  -32,768 to 32,767 |
| **long: 8 bytes - 64 bit data type that can hold more digits than a short** |