**Question 1**

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|  | The Java APIs are a lifesaver if you can’t remember what function to use for a datatype.  String <https://docs.oracle.com/javase/8/docs/api/java/lang/String.html>  Integer(int) <https://docs.oracle.com/javase/8/docs/api/?java/lang/Integer.html>  Scanner <https://docs.oracle.com/javase/8/docs/api/java/util/Scanner.html>  General API Search <https://docs.oracle.com/javase/8/docs/api/>  Here are some questions about the API to answer:  a) In the Integer API, what is the difference between hasNextInt() and nextInt()?  b) If you were working with a different version of Java (say 7), what is the easiest way to reach the API for that version?  c) In the Integer API, what function would be used to gather an int from a String?  d) In the String API, what functions are named the same as C++?  e) In the General API, is there a Severity class?  f) In the String API, what functions are used to compare other Strings? | |  |  |  |
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**Question 2**

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|  | Download, unzip ***and import*** the code found here:  <http://faculty.cse.tamu.edu/slupoli/notes/Java/flippedLabs/IntroJavaForC++/code/>  Within the “Question 2” headers within the code in Driver.java, complete the instructions shown in comments. Read over all of it first before beginning.  Submit the code. | |  |  |  |
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**Question 3**

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|  | Within the “Question 3” headers within the code in Driver.java, complete the instructions shown in comments. Read over all of it first before beginning.  Submit the code | |  |  |  |
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**Question 4**

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|  | Within the “Question 4” headers within the code in Driver.java, complete the instructions shown in comments. Read over all of it first before beginning.  Submit the code. | |  |  |  |
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**Question 5**

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|  | Within the “Question 5” headers within the code in Driver.java , complete the instructions shown in comments. Read over all of it first before beginning.  a) What are Java’s primitive types?  b) Are Java’s primitive types pass by value or reference?  c) Are Java’s String types pass by value or reference?  d) Are Java’s Array types pass by value or reference? | |  |  |  |
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**Question 6**

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|  | There has been a very nice addition (somewhat recently) to Java called StringBuilder.  What are the differences between String and StringBuilder? (you need to list a few differences) | |  |  |  |
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