StringBuilder Class

What is the StringBuilder Class

- A class that provides a mutable set of characters.

- The class is in the java.lang package

- Oracle documentation:
    https://docs.oracle.com/javase/8/docs/api/java/lang/StringBuilder.html

Using the StringBuilder class

1) Create an object of the StringBuilder class

       StringBuilder obj = new StringBuilder();

       or with a String value in the constructor

       StringBuilder obj = new StringBuilder("value here");

2) Use the object as a mutable String
       common methods:
              append(): The append method is overloaded to work with many datatypes. Using the append method will add the parameter to the end of the character sequence
              insert(): allows the character sequence to be added at a certain point
              reverse(): reverses the current character sequence
              toString(): converts the StringBuilder object to a String

Has some common methods a String class: charAt(), substring(), length(), indexOf()

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```
StringBuilder obj = new StringBuilder();
obj.append("hello ");
obj.append("world");
System.out.println(obj);


StringBuilder obj2 = new StringBuilder("reading a book");
obj2.reverse();
System.out.println(obj2);


StringBuilder obj3 = new StringBuilder("java is great");
obj3.insert(5, "add in middle ");
obj3.append(" to end ");
System.out.println(obj3);


StringBuilder obj4 = new StringBuilder("abcde");
System.out.println(obj4.charAt(0));
System.out.println(obj4.indexOf("e"));
```

Outputs:

hello world

koob a gnidaer

java add in middle is great to end

a
4

What is the StringBuffer Class

- A class that provides a thread safe, mutable set of characters. Works like Strings

- The class is in the java.lang package

- Oracle documentation:
        https://docs.oracle.com/javase/8/docs/api/java/lang/StringBuffer.html

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Practices

- Create a method that checks if the given String is a palindrome

- Any task that would require multiple manipulations of a String or set of characters can use a StringBuilder. Strings are not mutable so anytime the String would be modified a new one would be made, but those same modifications could be made to a StringBuilder object without the need to create a new object every operation.

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