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Project Writeup

By looking at the overall run-times for each class, it seems as if the String() class has the slowest run-time and the StringBuilder() class has the fastest. The String() class run-time is significantly longer than any other class when the specific methods are performed. If you were to look at the fastest individual methods, the StringBuilder() append method , the MyStringBuilder2() delete method, and the StringBuilder() insert method are the fastest. The overall run-times between the MyStringBuilder() class and StringBuilder() class are somewhat close if the values that they are working with is small. However, if the values were to get larger, there is a significant difference in run-time between the two. By looking at the different run-times for each method there is clear winner and the values are no really close. By looking at the overall sums for each class, it is more practical to use StringBuilder().

If you were to compare the MyStringBuilder() and MyStringBuilder2() class, the MyStringBuilder() class is significantly faster than the MyStringBuilder2() class. It is almost twice as fast. However, as stated before, the MyStringBuilder2() delete method works the fastest out of all the other delete methods even if it is done recursively. It is clearly shown that recursion overall takes up a lot of time because the method is called repeatedly instead of looping through the object iteratively (like the MyStringBuilder() class).