

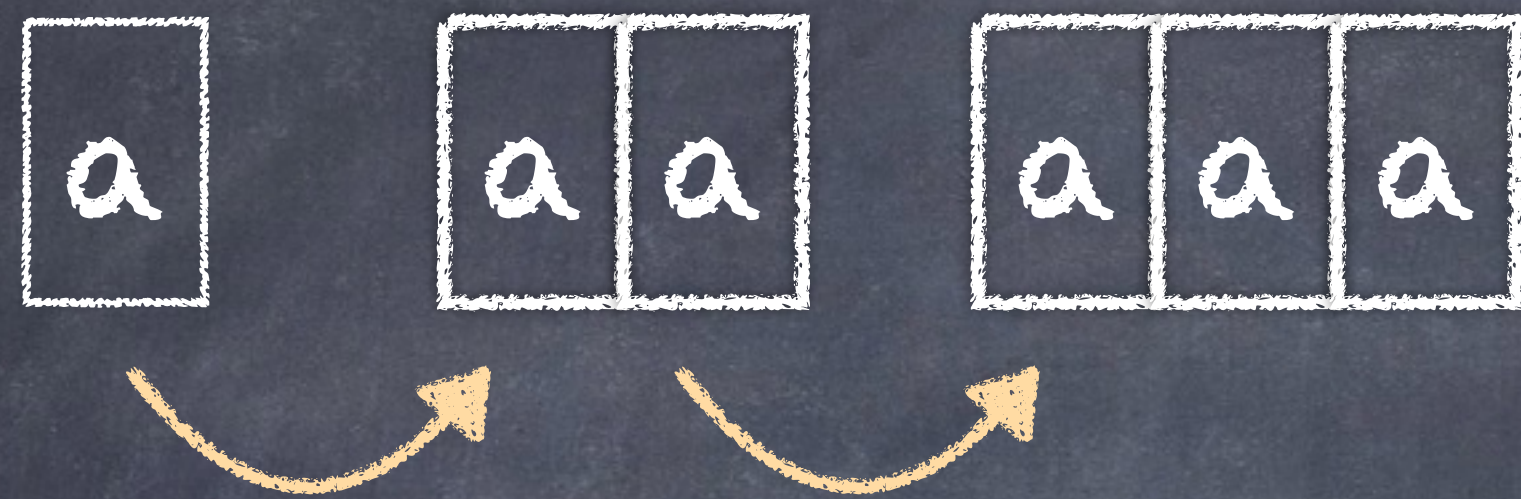
Fast string concatenation

Appending to a string:



each append to the string creates a **new copy** and leaves the dereferenced original on the heap

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Appending to a StringBuilder:



each append to the StringBuilder **writes** into available buffer space

Main Takeaway

- if you're adding strings together in your code, always use the `StringBuilder` class
- Try to avoid adding strings using the `+` operator

Fast string concatenation

- If you add 4 strings or less, use regular string variables and the + operator for the best performance
- If you add 4 strings or more, or you don't know the number of additions in advance, use a `StringBuilder`
- For ten thousand additions, the `StringBuilder` is more than 240 times faster than regular string addition.