

## Exercise Lab 5: String med värdesemantik

The assignment is about implementing a custom String class that will include among other things a copy constructor, a copy assignment operator and push\_back method that makes it possible to add new char to the string.

My code includes a calcCapacity function that calculates the capacity based on growth size and the current size.

My String class includes a extendCapacityIfNedded method that recreates the same string as char\* but with a larger size so it can fit the new changes. It uses the push\_back method.

The copy constructor copies all of the values (capacity, size, chars instance variables) of the imputed String argument.

The cstr constructor first calculates the cstr size, afterwards we use cstr size to calculate the initial capacity by using calcCapacity function, and lastly we copy over all characters from the inputted cstr.

The copy constructor copies over all the characters from rhs string and if the rhs string size is larger than current capacity we recreate the internal chars array to be the same capacity as the rhs string.