

Programming Exercises – Dynamic Memory (and pointers)

1. Create a program to input and display a number of values from a file (specified in the file), and only store as much data as you need to.
2. Implement a sorting function that will sort the array into a new, dynamically allocated array.
3. Try making a multidimensional, dynamically allocated array.
4. Try creating these c-style string functions that will work with dynamically allocated, exactly sized strings:

String copy: copies one c-string into another

String concat: adds one string onto the end of another

String length: returns the length of a string

Substring: returns the position of a substring within a string

String insert: inserts a string into another string

String replace: inserts a string into another string but doesn't push back the following characters.

String fill: fills a string with a character from a starting position to an ending position.

String reverse: flips a string backwards.