

EE 3223 (Fall 2015)

Assignment #6, Due: October 20 by 11:59:59 pm

Submission Procedure: Name your file as <LastNameFirstName>.cpp. Upload this file to **blackboard** by the due date.

(10 points) Look at the List code implementation based on dynamic array (lecture 17). Implement two `resize` class functions much like that of a vector:

<http://www.cplusplus.com/reference/vector/vector/resize/>

The signatures are:

void `resize(int n)`; /* `n` is the new list size, expressed in number of elements.*/

void `resize(int n, int val)`; /* `n` is the new list size, expressed in number of elements. Also, `val` is copied to the new slots added, in case that `n` is greater than the current list size.*/

These 2 functions should `resize` the list so that it contains n elements.

If `n` is smaller than the current list size, the content is reduced to its first n elements, removing those beyond (and de-allocating them).

If `n` is greater than the current list size, the content is expanded by inserting at the end as many elements as needed to reach a size of `n`. If `val` is specified, the new elements are initialized as copies of `val`, otherwise, they are initialized to 0.

If `n` is also greater than the current list capacity, an automatic reallocation of the allocated storage space takes place.

Notice that these functions may change the actual content of the list by inserting or erasing elements from it.