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Computer Programming (EE1005)

Homework #6

(Due: Apr. 29)

6.10: The bubble sort presented in Fig. 6.15 is inefficient for large arrays. Make the following simple modifications to improve the performance of the bubble sort.

(a) After the first pass, the largest number is guaranteed to be in the highest-numbered element of the array; after the second pass, the two highest numbers are "in place," and so on. Instead of making nine comparisons on every pass, modify the bubble sort to make eight comparisons on the second pass, seven on the third pass and so on.

6.31: (*Print a string backward*) Write a recursive function *stringReverse* that takes a character array as an argument, prints it back to front and returns nothing. The function should stop processing and return when the terminating null character of the string is encountered.