

LAB EXERCISE

Compact

Background:

A common task in array processing is to traverse a list and eliminate an undesired value. You will be provided with a text file named *compact.txt*, which contains non-negative (≥ 0) integers in random order. A text file of integers is provided. The number of integers in the file is not given, but it is no more than 100.

Assignment:

1. Write a program that reads a text file (*compact.txt*) and stores the integers in an array. Your instructor will provide this text file.
2. Write a method `compact` that removes all zeroes from the array, leaving the order of the other elements unchanged. All local variables within this function must be scalar. **In other words, you may not use a second array to solve the problem.**
3. Do not solve the problem by printing out only the non-zero values in the array. The `compact` method must actually remove all zeroes from the array.

Instructions:

1. Print out the list both before and after removing the zeros. For example:

Before: 0, 9, 7, 0, 0, 23, 4, 0

After: 9, 7, 23, 4
2. Your program must use proper modular design and parameter passing.
3. Display your run output and call your instructor to your workspace for scoring.