

Algorithm Analysis Homework 6

Due by 6/10(Fri.)

$A[]$ array in counting sort algorithm in textbook/slide is indexed from 1 to n .
Revise the algorithm so that $A[]$ array is indexed from 0 to $n-1$.

In main,

- generate n random number with certain seed number.
- resize range of random numbers from 0 to k .
- store them in array $A[]$
- and pass the array to function CountingSort(.....).

In function CountingSort(.....), just sort the array and display the result.

When your program is graded, grader will decide seed value, n , and k . Assume n and k value does not exceed 1,000.

You should use 'C/C++(extension is cpp)' language for homeworks as described in syllabus. You may use any feature in C++ including STL. (But, you probably do not need any fancy feature of C++.)

Note

- 1) Try to make your output as neat as possible, so that other person can see what you have done clearly.
- 2) If the program does not compile, you will get no point. Make sure that your program runs in g++.
- 3) At header part of comment, list all the references you used when you do this homework.

For ex)

- (1) 강의 slide chapter 16.
- (2) Blog: ** URL here **
- (3) book: "Algorithm analysis in C++" by Someone

● Please do not search the web. to do this homework. The program is rather easy and fun... Hopefully!