

Combine the random number generation code given in class with either the bubble sort or the selection sort and create a program which (1) asks how many numbers to generate, between 1 and 80,000 numbers, (2) asks how big the numbers should be (limit is MAXINT), (3) generates the given numbers and prints them out in 10 columns, (4) sorts the numbers, and (5) prints them out again in 10 columns.

In the comment section, immediately after your name, place the answers to the following questions:

1. approximately how long, in seconds, does it take to sort 20,000 numbers?
2. approximately how long does it take to sort 40,000 numbers?
3. 80,000 numbers?

Do not count the time it takes to generate and/or print the numbers. Use the clock function to determine the time it takes to sort the numbers. Make sure you only count the sorting time, and not the time to generate the random numbers or the time to print them out to the screen.

Turn in your program, named Rand_Sort.CPP via the EASEL system.