

CSC230 Lab 11

Due: May 2nd, 11:59pm

Goal: This lab will help practice quick sort algorithm.

Our lecture discussed Quick Sort algorithm. In this lab, please implement quick sort algorithm in `lab11.cpp` file. This executable file reads integers from an input file, which is given at command line. The imported integers are stored in an internal `int` array. You can make the array size to be 1000. In other words, we assume the input data file can have at most 1000 integers. After importing the integers from the data file, the `main()` function calls the quick sort function, then `main()` function prints out the result.

Three data files are provided in this lab. They are *test*, *test100.txt*, and *test200.txt*. The file *test* has only 14 integers. I suggest you use *test* file to debug the code.

Once you finish the coding, type the following command to compile it.

```
g++ lab11.cpp -o lab11
```

The execution result of `test.cpp` is:

```
ying$ ./lab11 test
Quick Sort Result is:
12
32
33
43
54
75
78
234
243
312
543
636
8567
8976
```

Your implementation must have the exactly same result.

Wrap up

submit the `cpp` file