# Assignment 7

You are working for BigUpAndComingBank. This morning your manager told you the news that the bank has just reached the 10 million customer mark! However, there is a problem: The database has become totally messed up. Your task now is to sort the database. To test your sorting method, you first make use of a file with 10 million random integers. However, you quickly realise that it is rather time-consuming to test your method on the full 10 million integers, therefore you first make use of a smaller file with only 20 random integers. Once you are certain that your method works correctly you use the full 10 million integer file to measure your sort method’s execution time.

Download the files:

* 10Mints.txt
* 20ints.txt
* SortTest.java

The application **SortTest.java** contains code to create an array and read the integers from the data file into the array. It also contains code to time the sorting method. To have the method read the data from one of the files you need to redirect standard input. This is done using the following instruction on the command line:

**java SortTest < 20ints.txt**

Replace the line: **Arrays.sort(data,0,num);** with your own code to sort the array. You may make use of any resource to assist you in creating a sort method. You may however not make use of Java’s sort methods.

# Rubric

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| --- | --- |
| Instruction | Mark |
| Sorting | 10 |