

**“The Biggest”**

**Problem:** Given a positive integer less than 10,000, find the largest possible number than can be formed by rearranging the digits of the number. For example, an input of 6859 would have an output of 9865.

**Sample Input:**

Line #1: 6859  
Line #2: 4312  
Line #3: 1357  
Line #4: 2439  
Line #5: 512

**Sample Output:**

Output #1: 9865  
Output #2: 4321  
Output #3: 7531  
Output #4: 9432  
Output #5: 521

**A Reminder:** The gist of the ACSL rules are as follow: You have 72 hours to complete the program and test it on your own data. You may use any computer you can access (and have permission to use!), and you must work alone. Your program is run just once with the ACSL Test Data. This means that your program must accept all the data without ending. Because the test data becomes more difficult towards the end, we suggest that you output answers as you compute them. Hardcopy of the program of all students scoring a perfect 10 must be sent to ACSL. (Some of these programs will appear in the ACSL Newsletter, so be sure to document your code and to include your name, school, and division!) *Good luck!*

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**Test Input:**

Line #1: 2684

Line #2: 1812

Line #3: 109

Line #4: 78

Line #5: 5

**Test Output:**

Output #1: 8642

Output #2: 8211

Output #3: 910

Output #4: 87

Output #5: 5