

Project Example (replace this with problem title)

資訊概論 (IN102)

Introduction to Computer Science

International Bachelor Program in Informatics

Yuan Ze University

Rung-Bin Lin

Student ID #: s1234567

Due: November 22, 2021

Problem Description

Given n integers a_1, a_2, \dots, a_n , $-65536 \leq a_i \leq 65535$ for $i = 1, 2, \dots, n$, find the second largest number. For example, given 10 integers -29, 87, -56, 87, 9, 66, 5, 93, 5, 68, the second largest number is 87. Note that the given integers can have the same value.

Input Format

The first line gives the number of test cases. It is then followed by the input data for each test case. The input for each test case has $n + 1$ integers which are in order of n, a_1, a_2, \dots, a_n , where n gives the number of a_i 's. Each line takes only one integer.

Technical Specification

- $n \geq 1$

Output Format

Print the second largest number on a line for each test case. If there is not any second largest number, just print the largest number.

Example (Note that input and output should be integers only)

Sample Input:	Sample Output:
2	80
8	-1
-9	
9	
89	
45	
27	
-5	
80	

60	
3	
-1	
-1	
-1	

```

G:\Users\1409B\Documents\CBP\Simple-computer-Memory-Mapped-IO-with-comments-YZU-ISA-V2.2\bin\Debug\Simple-computer-Me...
Welcome to the Instruction Set Simulator for YZU-ISA-V2.
This instruction set simulator is copyrighted by Rung-Bin Lin, October 30, 2018.

Print out the register content? (Y for yes): n
Print out the machine code? (Y for yes): n
Specify the initial value of program counter: 100
PC is set to a value = 100
Load program from file (Y for yes): y
Enter file name of the program: findSecondLargestNumberSimpler.txt

** M_findSecondLargestNumberSimpler.txt is created for storing the modified source code with comments being removed
** and labels being replaced by their corresponding offsets.
Continue to execute the code? (Y for continuing): Y
IN: 5
IN: -1
IN: 0
IN: 2
IN: 0
IN: 2
OUT: 0
*** Program terminated ***

Run another program? (Y for yes):

```