

Largest and Second Largest

You are given an array A of N integers.
Find the **maximum** sum of **two distinct** integers in the array.

Note: It is guaranteed that there exist at least two distinct integers in the array.

Input Format

- The first line of input will contain a single integer T , denoting the number of test cases.
- Each test case consists of multiple lines of input.
 - The first line of each test case contains single integer N — the size of the array.
 - The next line contains N space-separated integers, denoting the array A .

Output Format

For each test case, output on a new line, the maximum sum of two distinct integers in the array.

Constraints

- $1 \leq T \leq 1000$
- $2 \leq N \leq 10^5$
- $1 \leq A_i \leq 1000$
- The sum of N over all test cases does not exceed $2 \cdot 10^5$.

Sample 1:

Input	Output
4	10
3	12
4 1 6	17
7	3
3 7 2 1 1 5 3	
5	
8 2 9 4 9	
2	
1 2	

Explanation:

- Test case 1:** The maximum sum of two distinct elements is $4 + 6 = 10$.
- Test case 2:** The maximum sum of two distinct elements is $7 + 5 = 12$.
- Test case 3:** The maximum sum of two distinct elements is $8 + 9 = 17$.
- Test case 4:** The maximum sum of two distinct elements is $1 + 2 = 3$.