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Equilibrium number

Problem Code: **EQUINUM**

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Problem description.

An array of **n** integers is given in which we should select an equilibrium number.the equilibrium number is the number for which the sum of numbers left to the equilibrium number in the array is equal to the sum of elements to the right.If equilibrium number does not exist print 'NO EQUILIBRIUM' without quotes

Input

Input description.

- First line of input contains an integer **T** denoting number of test cases
- First line of each test case contains an integer **n** denoting number of elements in array
- next line contains n space separated integers of array

Output

Output description.

- For the test case output k represents the equilibrium element of the given array
- If there exists no equilibrium element display a message saying NO EQUILIBRIUM

Constraints

- $1 \leq T, n \leq 10^5$
- $1 \leq \text{array element} \leq 10^9$

Example

Input :

2

6

7 2 4 5 1 3

4

23 32 12 4

Output :

4

NO EQUILIBRIUM

Explanation:

- In the given example the sum of all the elements to the left of 4 is 7+2=9.And the sum of all the elements to the right of 4 is 5+1+3=9 these two are equal so the equilibrium element is 4

All submissions for this problem are available.

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Time Limit: 1 secs

Source Limit: 50000 Bytes

Languages: CPP14, C, JAVA, PYTH 3.6, PYTH, CS2, ADA, PYPY, PYP3, TEXT, PAS fpc, RUBY, PHP, NODEJS, GO, TCL, HASK, PERL, SCALA, BASH, JS, PAS gpc, BF, LISP sbcl, CLOJ, LUA, D, CAML, ASM, FORT, FS, LISP clisp, SCM guile, PERL6, CLPS, WSPC, ERL, ICK, NICE, PRLG, ICON, PIKE, SCM chicken, SCM qobi, ST, NEM

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