

Sabbir and Game

Sabbir is a little boy. he loves to play. One day his friend taskin suggested a new interesting game. there are n levels in the game. one should pass all the levels with a positive life-point. in some level one can increase his life-point by defeating the villain of the game or lose some life-point when one can't defeat the villain. Sabbir knows the points he is going to lose or increase in each level. determine the minimum life-point sabbir should have initially (at the starting of the game) to pass all the levels with a positive life point.

Input

input consists of at most 100 test cases.

first line consists of a single integer T ($1 \leq T \leq 100$) number of test cases

each test case is consists of two lines. first line consists of an integer n ($1 \leq n \leq 1000$)

second line consists of n space separated integer $a_1, a_2, \dots, a_{n-1}, a_n$ ($-10^7 \leq a_i \leq 10^7$)

Output

for each test case print an integer in one line , the minimum life-point sabbir will need initially.

Example

Input:

```
3
3
5 -8 3
4
1 2 -3 5
3
1 0 3
```

Output:

```
4
1
0
```

explanation:

first case, if sabbir have 4 life-points at first. sabbir will have 9 points after playing 1st level, he will have 1 point after playing 2nd level, he will have 4 points after playing 3rd level... his points never becomes less than 1 (remains positive) . if he