

## B. Party

time limit per test: 2 seconds  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

$n$  people came to a party. Then those, who had no friends among people at the party, left. Then those, who had exactly 1 friend among those who stayed, left as well. Then those, who had exactly 2, 3, ...,  $n - 1$  friends among those who stayed by the moment of their leaving, did the same.

What is the maximum amount of people that could stay at the party in the end?

### Input

The first input line contains one number  $t$  — amount of tests ( $1 \leq t \leq 10^5$ ). Each of the following  $t$  lines contains one integer number  $n$  ( $1 \leq n \leq 10^5$ ).

### Output

For each test output in a separate line one number — the maximum amount of people that could stay in the end.

### Examples

input
1 3
output
1