edX   **ITMOx: I2CPx How to win coding competitions: secrets of champions**   **Help**

Week 1 > 1st Week Problems: Training > Win the Competition!

Win the Competition!

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Win the Competition!
0 points possible (ungraded)

Input file:	win.in
Output file:	win.out
Time limit:	2 seconds
Memory limit:	256 megabytes

Bad is the team which doesn't dream of winning a competition! However, in order to win, it is necessary to understand what you can do, distribute your forces the right way, and implement your ideas precisely.

The team of three, Dream Team, can do this rather well. In particular, since the very beginning of the competition it manages to understand, for every proposed problem, how much time it will take them to solve it. This way, they are able to efficiently distribute their time during the competition. But it is not enough for a victory. It is necessary to solve the maximum possible number of problems.

Write a program that, given the time Dream Team needs to solve every proposed problem, can determine what is the maximum possible number of problems they can solve in 300 minutes, which is the timespan of ACM ICPC World Finals.
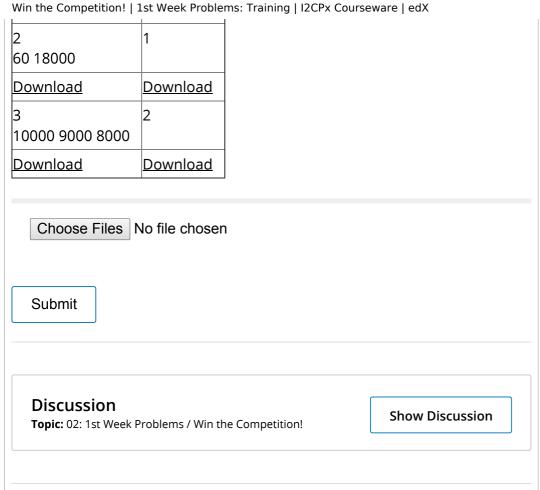
Input
The first line of the input file contains an integer number n ($1 \leq n \leq 15$) – the number of proposed problems. The second line contains n integer numbers t_1, t_2, ..., t_n, where t_i is the time, **in seconds**, which is required to solve the i-th problem. All t_i are positive and don't exceed 10^5. Please recall that one minute consists of 60 seconds.

Output
Output the single number – the maximum number of problems, which Dream Team can solve.

Examples

win.in	win.out

2 60 18000	1
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3 10000 9000 8000	2
Download	Download

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