Explanation for the solution of the task Trap

The sequence obtained as a solution for input data i = 7, 8, 9, 10, 11,... is the following:

1,2,11,25,95, ...

and is described under number A077482 B The On-Line Encyclopedia of Integer Sequences® (OEIS®), https://oeis.org/

Values are calculated by exhaustive search or by a backtracking method. Since the competitor has to submit a program whose running time is traditionally limited to about a second, tabulation of results in this program is used. The results are obtained by separate pre-calculation. For this purpose, the competitor has to write an auxiliary search program and to run it for a long time. The maximum value in the input is chosen so that the auxiliary program will have enough time to run no more than 30 minutes on the computer that is provided to the participant at the competition place.

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