



Problem 7: Strategic Problem Solving

Time limit: 2 seconds

In the International Collegiate Programming Championship (ICPC), you and your team face a series of problems, each with its own score and estimated time to solve. Your objective is to maximize your team's total score within the contest's limited timeframe. However, each problem can only be solved once, and the time spent on each problem is crucial. Your challenge is to select the most advantageous set of problems to solve, optimizing your score while adhering to the time constraints.

Input

The first line of the input contains two integers N and T , where N ($1 \leq N \leq 100$) is the number of available problems and T ($1 \leq T \leq 300$) is the total time available for the contest in minutes.

Each of the next N lines provides details about a problem, containing two integers: the problem's score S ($1 \leq S \leq 1000$) and the estimated time t ($1 \leq t \leq 200$) in minutes required to solve it.

Output

Produce a single integer, the maximum total score that can be achieved within the given time limit.

Sample input	Sample Output
4 300 500 150 800 200 400 100 300 120	1200