Problem A. Saka loves keyboards

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Saka is a keyboard lover. Even if he has a gamer laptop with an incredible RGB high quality keyboard, he want to buy more keyboards.

Saka went to a shop and found N keyboards, every keyboard has a cost c_i and quality q_i. To buy keyboards, Saka follows a certain principle as he choose the keyboards : the total cost to the total quality ratio of the chosen fruits must equal k. In other words, $\frac{\sum_{j=1}^{m}(c_j)}{\sum_{j=1}^{m}(q_j)} = k$, where c_j is the cost of the j-th chosen keyboard and q_j is its quality.

Saka hasn't chosen the keyboards yet, he is thinking : what is the maximum cost of the chosen keyboards if he strictly follows his principle ?

Input

The first line contains T the number of test cases.
Each test case has lines :
- First line of the test case contains two integers N, K $(1 \leq N \leq 100, 1 \leq K\ leq10)$.
- The second line contains N integers $c_1, c_2, c_3, ..., c_N (1 \leq c_i \leq 100)$ the keyboard's costs.
- The thirst line contains N integers $q_1, q_2, q_3, ..., q_N (1 \leq q_i \leq 100)$ the keyboard's qualities.

Output

For each test case : If there is no keyboard Saka can buy, print in the single line number -1. Otherwise, print a single integer – the maximum possible sum of the cost values of the chosen keyboards.

Example

standard input	standard output
2 3 2 10 8 1 2 7 1 5 3 4 4 4 4 4 2 2 2 2 2	18 -1