## B. Mix It.

Time Limit - 1 seconds

Chrissy likes mixing audio tracks to make CD. She is going to go on a holiday soon. So she has decided to quickly collect songs to make  $\mathbf{n}$  CDs. She has already used some minutes of her CDs. CD no.  $\mathbf{i}$  ( $\mathbf{1} <= \mathbf{i} <= \mathbf{n}$ ) can contain  $\mathbf{K}\mathbf{i}$  minutes of song. And has  $\mathbf{D}\mathbf{i}$  minutes left free to be filled. Now she has  $\mathbf{m}$  tracks left. The length of the j-th song is ( $\mathbf{1} <= \mathbf{j} <= \mathbf{m}$ )  $\mathbf{P}\mathbf{j}$  minutes. She wants to use those songs in the free spaces of the CDs to keep the total used minutes of all CDs maximum.

She can take a single song for several CDs. **BUT** at most **one** song can be added in a CD. And songs can be kept unused too.

Now Chrissy is cool and all but not good in calculation. So she wants your help in optimizing the solution so that she can make the total length of all CDs as large as possible. It will be super lame if you don't help Chrissy. Who knows she might dedicate her next cover to those solving the problem.

## Input:

First line contain test case number **T(1<=T<=100)**.

The next line contains n (1 <= n <= 100) and m (1 <= m <= 100). Each of the next n line contains two integers. K (1 <= K <= 100) and D (0 <= D <= K), describing the total and free space of a CD.

The next line contains **m** integers. The i-th integer is the length of the i-th songs.

## **Output:**

The possible maximum total length.

Sample Input	Sample Output
1	48
4 6	
10 2	
12 1	
13 4	
15 10	
9 13 4 1 14 5	