

Hanging Beads

Chanu has a chain with N beads, the i 'th bead has weight W_i and price C_i . Since Chanu is very naughty he wants to place the chain hanging from the edge of the table with K beads hanging and the remaining $N-K$ beads on the table.

You want to punish Chanu for being a bad boy (hence you steal from him), you can only remove beads from the ends, but the number of hanging beads must be exactly K (else he would notice). So if you remove a bead from the hanging part, the chain shifts such that the number of beads hanging remain constant.

The chain must never fall down, let the weight of the part of chain on the table be X and the remaining be Y , so $X \cdot Q \geq Y$. You want to maximize the sum of price of the beads you steal. Punish Chanu!

Input:

First line contains the number of test cases T .

For Each test case:

First line contains 3 integers N, K, Q

Next line contains N values i th value denoting weight of i th bead (W_i)

Next line contains N values i th value denoting price of i th bead (C_i)

*Initially last K beads are hanging

Memory Limit: 256 MB

Time Limit: 1 sec

Output:

Single number denoting the maximum you can steal.

Constraints:

$1 \leq T \leq 10$

$2 \leq K < N \leq 10^5$

$0 \leq W_i, C_i, Q \leq 10^9$

*It is guaranteed that initially the chain will not fall down.

Sample Input:

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1
5 2 1
5 4 6 3 2
3 2 4 2 2
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Sample Output:

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5
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