

BATMAN1

" Lucius Fox: *This conversation used to end with an unusual request.*

Bruce Wayne: *I'm retired.*

Lucius Fox: *Well let me show you some stuff anyway. Just for old time's sake. "*

Eight years after Harvey Dent's death, the Dent Act allowed eradication of organized crime . BATMAN has disappeared . Wayne enterprises is unprofitable after Bruce discontinued his fusion reactor project . A masked man called Bane who was trained under Ra's al Ghul captures Gordon . Bane attacks the Gotham Stock Exchange, using Bruce's fingerprints in a transaction that bankrupts Wayne .

Now that gotham city was heading into deep deep trouble , Its time for BATMAN to return .

However , since the company no longer belongs to Bruce Wayne , Mr. Wayne has very little funds to spend on buying his weaponaries. Mr Fox head him to the place where all weapons are stored .

Now these weapons come in batches properly sealed for safety .Each of these batches will have an unbounded number of weapons of different types . To buy these weapons Wayne initially need to pay the price for opening the seal . Then each of these weapons have a cost and a power rating associated with it . Mr Wayne needs to spend wisely on it to maximize the power rating using limited amount of money.

People of Gotham , he needs your help for choosing his weaponaries .

"Lucius Fox : *It has a long uninteresting name. I just took to calling it... The Bat, and yes, Mr. Wayne, it does come in black."*

Input

t , number of testcases

integers n m k,

n: no of batches , m: no of weaponaries per batch , k : Money wayne can spend on weaponaries

n intergers giving cost of opening the ith batch

n*m numbers denoting cost of jth object from ith batch

n*m numbers denoting the rating oj jth object from ith batch

Output

The maximum power rating Wayne could afford

Constraints :

$1 \leq n, m \leq 20$

$k \leq 1000$

$\text{cost}[i] \leq 20$, $\text{rating}[i] \leq 100$

Example

Input:

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1
2 4 20
3 4
3 2 3 2
3 2 3 5
3 2 3 2
4 5 6 5
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Output:

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40
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