

# OCC '19 B2 - Cinematic

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**Time limit:** 2.0s    **Memory limit:** 64M  
Java 8: 1.4s

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There are  $N$  movies that can be playing at a movie theater over the year. Each movie has an enjoyment rating of  $X_i$ . Each weekend, Momo can choose to watch a movie at the movie theater. There is only 1 movie playing every weekend. After Momo watches a movie, she cannot watch the same movie again even if it plays again. In the planet where Momo lives on, there are  $Y$  weeks in a year. Find the maximum sum of the enjoyment that Momo can obtain from watching the movies.

## Input Specification

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The first line of input contains  $N$ , the number of movies that can be played, and  $Y$ , the number of weeks in a year.

The next  $N$  lines of input contain the names of the movies.

The next line of input contains  $N$  integers, the enjoyment factor of each movie.

The next  $Y$  lines of input contain the name of the movie that is playing that week.

## Output Specification

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Output the maximum sum of enjoyment Momo can get from watching the movies.

## Constraints

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$$1 \leq N, Y, X_i \leq 10^5$$

The length of the title of each movie is less than 30 characters long and consists only of alphanumeric characters with no spaces.

## Sample Input 1

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3 5
Doestheblackmoonhowl
Oceaneyes
MobileOrchestra
10 9 8
Doestheblackmoonhowl
MobileOrchestra
Doestheblackmoonhowl
Doestheblackmoonhowl
Doestheblackmoonhowl
```

## Sample Output 1

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18

## Explanation 1

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Doestheblackmoonhowl and MobileOrchestra are shown during the 5 weeks of the year while Oceaneyes is not. The enjoyment factor of the two movies that are shown during the year is 18.