Monk And Monster

Monster is troubling the Monk. Monk is given a task to completely traverse the string P

. Monster owns a string Q

.

Monk cannot traverse the string P

if there is an **index i** in P such that Q is a **prefix** of the **sub-string** of P

starting at ***'i'*** until Monster allows him to do so.Monk is rich so he pays the monster whenever he finds such an index and Monster asks him for money.

Monster takes **different** amounts of money for allowing a jump at **index i**. Thus, you are given 2

strings P and Q and a **cost array**. The size of the array is N which is same as length of P

.Determine the **maximum** amount Monster can get from Monk. By jump it means that if Monk jumps at index **'i'** then he reaches index **'i+|Q|'**.

**Note**:

N

is guaranteed to be equal to |P|

Monk **cannot** jump at any index **until** Q

is a prefix of substring at index i of P

.

If Monk **doesn’t jump** at any particular index he **doesn’t pay** anything.

Monster **may**(i.e it is not necessary) ask for money from Monk if Q

is a prefix of substring at index i of P

. He may also let him go for free if he thinks he can gain more in future.

**Input:**

First line contains number of **testcases T.**

Each testcase consists of four lines:  
First line consists of string P

.  
Second line consists of string Q.(Both strings consist of **lowercase** English characters only).  
Next line contains an integer N

.  
Next line contains an **integer** cost array.

**Output:**

Output the **maximum** amount Monster can get.

**Constraints:**

1≤T≤10

2≤|Q|≤|P|≤105

N=|P|

1≤Cost[i]≤20

Sample Input

3

aaaaa

aa

5

1 6 3 10 2

qwer

asd

4

1 2 3 4

oksirok

ok

7

4 2 5 11 12 4 6

Sample Output

16

0

8

Explanation

In **1st** case the match occurs at index 1,2,3,4

. So Monster takes money from him at index 2 and 4 (6+10) which leads to a **maximum** gain of 16

.

In **2nd** case there **isn't** any match so answer is 0

.

In **3rd** case the match occurs at index 1

and 6 thus Monster takes money at both these indexes and gaining amount of (4+4)=8

.

Note: Your code should be able to convert the sample input into the sample output. However, this is not enough to pass the challenge, because the code will be run on multiple test cases. Therefore, your code must solve this problem statement.

Time Limit: 1.0 sec(s) for each input file