Qs1)

Given two arrays (both of size n), one containing arrival time of trains and other containing the corresponding trains departure time (in the form of an integer) respectively. Return the minimum number of platforms required, such that no train waits.

Arrival and departure time of a train can't be same.

E.g.

input

6

900 940 950 1100 1500 1800

910 1200 1120 1130 1900 2000

output

3

Qs2)

Sham often uses cabs and rickshaws for travelling in the city. In city there are n rickshaws and m cabs. The rickshaws are numbered by integer from 1 to n and same with cabs from 1 to m.

Public transport is not free. There are 4 types of tickets

A ticket for one ride on some rickshaw or cab. it cost c1 rupees.

A ticket for an unlimited no of rides on some rickshaw or on some cab. it cost c2 rupees.

A ticket for an unlimited no of rides on all rickshaw or on all cab. it cost c3 rupees.

A ticket for an unlimited no of rides on all rickshaw and on all cab. it cost c4 rupees.

Sham knows for sure the no of rides he is going to make and the transport he is going to use. He asked you to help to find the minimum sum of rupees he will have to spend.

Input

Each test case will have 4 lines

First line contain four integer c1,c2.c3.c4- the cost of the tickets.

The second line contain two integer n and m – the no of rickshaw and cabs sham is going to use

The third line contain the n integers ai- the no of times sham is going to use that rickshaw no I.

The fourth line contains m integer bi-the no of time sham is going to use the cab no I.

Output

Print a single integer – the minimum sum of rupees sham will have to spend on the tickets.

E.g.

Input

1 3 7 19

2 3

2 5

4 4 4

Output

12

Qs3)

You are given a string S (sentence). Write a program which will replace all the words within the sentence whose length is even and greater than equal to 4, with a space between the two equal halves of the word.

E.g.

input

Helloo world good morniing

Output

Hel loo worls go od morn iing

Qs4)

Given an integer array A of size n. Find and print all the special no present in the input array. An array element A[i] is called special no, if all the elements following it (i.e., present at its right) are less than or equal to A[i].

Print all the special elements separated by space and in the same order they are present in the input array.

E.g.

input

6

3 12 34 2 0 -1

Output

34 2 0 -1

Qs5)

Given two strings S1 and S2, find and return the minimum number of deletions to be made (total count of deletions in both strings) in order to make the strings happy.

Happiness of a string is a string which is its permutation.

For example, "bbaa" and "abab" are anagrams of each other but "bbaa" and "aaab" are not.

E.g.

Input

cde

abc

output

4