Sample Question:-

There is two sequence X and Y. One another sequence Z such that

$$Z(k)= \sum X(n)*Y(-n + k),$$

where , m=max (length (X), length (Y));

length (Z) = 2*m-1;

k=-(m-1) to (m-1);

Calculate sequence Z by given mathematical expression for input sequence X and Y ?

Input:

t =number of test case;

x =first sequence;

y =second sequence;

Output:

z = output sequence;

Sample input:

2

[1 2 3 4]

[-1 2 1 -1]

[1 2 1 3 4]
[2 1 5]

Sample output:-
[-1 0 2 3 9 1 -4]
[2 5 9 17 16 19 2 0 0]