

Question: 01

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

$$Z(k) = \sum X(n) * Y(n-k), \quad \text{for } n=1 \text{ to } m$$

where , $m = \max(\text{length}(X), \text{length}(Y))$; $m \geq 1$

$\text{length}(Z) = 2 * m - 1$;

$k = -(m-1) \text{ to } (m-1)$;

$p = \text{abs}(Z(i) + Z(j))$; $i \neq j$; (p= absolute sum of two element of array Z);

you have to find maximum value of p ;

Input:

t =number of test case;

x =first sequence;

y =second sequence;

Output: maximum possible value of p;

Sample input:

2

[1 2 3 4]

[-1 2 1 -1]

[-2 5 -4]

[2 3 2 7]

Sample output:-

13

38

Note:- In second case $z = [-14 \ 31 \ -24 \ 3 \ -2 \ -8 \ 0]$, $p = \text{abs}(-24 + (-14)) = 38$