Problem A. G Game

Time limit	1000 ms
Mem limit	262144 kB
OS	Windows

Abdulrahman and Hazem are playing a game. They have an array a of n integer numbers. Abdulrahman will choose p indices $x_1, x_2, \dots x_p$ and Hazem will choose q indices $y_1, y_2, \dots y_q$ where no index is chosen by both players. I.e. $x_i \neq y_j : 1 \leq i \leq p, 1 \leq j \leq q$.

After choosing their indices, let us denote the score of the players as the sum of the integers he chose from the array:

- Abdulrahman's score as $S_a = \sum_{i=1}^{i=p} a_{x_i}$
- Hazem's score as $S_b = \sum_{i=1}^{i=q} a_{y_i}$

Now given P and Q find the maximum value for $S_a - S_b$ if Abdulrahman cannot choose more than P index and Hazem cannot choose more than Q index ($p \leq P, q \leq Q$)

Input

The first line of input contains one integer T ($1 \leq T \leq 10^5$) denoting the number of testcases.

The first line of each testcase contains three space-seperated integers N ($1 \leq n \leq 10^5$), P and Q ($0 \leq P, Q \leq n$)

The second line of each testcase contains n space-seperated integers $a_1, a_2, ..., a_N$ ($-10^9 \leq a_i \leq 10^9$)

Its guaranteed that the sum of n over all testcases is less than or equal to 10^5.

Output

Print the maximum value for $S_a - S_b$ Abdulrahman and Hazem can obtain.

Sample 1

Input	Output
3 3 1 1 -2 0 2 3 1 2 6 3 -4 5 0 2 10 -6 -9 8 -7	4 10 16