

Given two arrays **X** and **Y** of positive integers, find the number of pairs such that $x^y > y^x$ (**raised to power of**) where x is an element from **X** and y is an element from **Y**.

Example 1:

Input:

$M = 3, X[] = [2\ 1\ 6]$

$N = 2, Y[] = [1\ 5]$

Output: 3

Explanation:

The pairs which follow $x^y > y^x$ are
as such: $2^1 > 1^2$, $2^5 > 5^2$ and $6^1 > 1^6$.

Example 2:

Input:

$M = 4, X[] = [2\ 3\ 4\ 5]$

$N = 3, Y[] = [1\ 2\ 3]$

Output: 5

Explanation:

The pairs for the given input are
 $2^1 > 1^2$, $3^1 > 1^3$, $3^2 > 2^3$, $4^1 > 1^4$,
 $5^1 > 1^5$.

Your Task:

This is a function problem. You only need to complete the function **countPairs()** that takes **X, Y, M, N** as **parameters** and returns the total number of pairs.

Expected Time Complexity: $O((N + M)\log(N))$.

Expected Auxiliary Space: $O(1)$.

Constraints:

$$1 \leq M, N \leq 10^5$$

$$1 \leq X[i], Y[i] \leq 10^3$$