

- Given: Two integer permutations A and B of length n .
- A prefix common array of A and B is an array C if $C[i]$ is equal to the count of numbers that are present before or at index i in both A and B.
- Return prefix common array of A and B

Note: A sequence of n integers is called a permutation if it contains numbers $1 \dots n$ exactly once.

Ex) $[1, 3, 2, 4]$

Input: $A = [1, 3, 2, 4]$ $[1, 4, 2, 3]$
 $B = [3, 1, 2, 4]$ $[3, 2, 1, 4]$

Output: $[0, 2, 3, 4]$ $[0, 0, 2, 4]$

Approach: for each iteration has the value been seen twice?
 If so update count by 1.

We can leverage the map.

vector<T> result

map<T, int> m

for $i = 0 \rightarrow \text{len}(A)$

$m[A[i]] += 1$

$m[B[i]] += 1$

$\text{result}[i] = \text{result}[i-1] + m[A[i]] == 2 + m[B[i]] == 2$

return result;