#include <bits/stdc++.h>

using namespace std;

void printUnion(int arr1[], int arr2[], int m, int n)

{

int i = 0, j = 0;

while (i < m && j < n) {

if (arr1[i] < arr2[j])

cout << arr1[i++] << " ";

else if (arr2[j] < arr1[i])

cout << arr2[j++] << " ";

else {

cout << arr2[j++] << " ";

i++;

}

}

/\* Print remaining elements of the larger array \*/

while (i < m)

cout << arr1[i++] << " ";

while (j < n)

cout << arr2[j++] << " ";

}

void printIntersection(int arr1[], int arr2[], int m, int n)

{

int i = 0, j = 0;

while (i < m && j < n) {

if (arr1[i] < arr2[j])

i++;

else if (arr2[j] < arr1[i])

j++;

else /\* if arr1[i] == arr2[j] \*/

{

cout << arr2[j] << " ";

i++;

j++;

}

}

}

int main()

{

int arr1[] = { 1, 2, 4, 5, 6 };

int arr2[] = { 2, 3, 5, 7 };

int m = sizeof(arr1) / sizeof(arr1[0]);

int n = sizeof(arr2) / sizeof(arr2[0]);

printUnion(arr1, arr2, m, n);

printf("\n--------\n");

printIntersection(arr1, arr2, m, n);

return 0;

}