class Main {

/\* Function prints union of arr1[] and arr2[]

m is the number of elements in arr1[]

n is the number of elements in arr2[] \*/

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

{

int i = 0, j = 0;

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

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

System.out.print(arr1[i++] + " ");

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

System.out.print(arr2[j++] + " ");

else {

System.out.print(arr2[j++] + " ");

i++;

}

}

/\* Print remaining elements of

the larger array \*/

while (i < m)

System.out.print(arr1[i++] + " ");

while (j < n)

System.out.print(arr2[j++] + " ");

return 0;

}

static 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 {

System.out.print(arr2[j++] + " ");

i++;

}

}

}

public static void main(String args[])

{

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

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

int m = arr1.length;

int n = arr2.length;

printUnion(arr1, arr2, m, n);

System.out.println();

System.out.println("------");

printIntersection(arr1, arr2, m, n);

}

}