Practical No:- 1(b)

1. (b) Read the arrays from the user and merge them and display the elements in sorted array.

Practical Implementation:-

Code:-

// C++ program to merge two sorted arrays/

#include<bits/stdc++.h>

**using** **namespace** std;

**void** mergeArrays(**int** arr1[], **int** arr2[], **int** n1,

**int** n2, **int** arr3[])

{

**int** i = 0, j = 0, k = 0;

      // traverse the arr1 and insert its element in arr3

**while**(i < n1){

      arr3[k++] = arr1[i++];

    }

      // now traverse arr2 and insert in arr3

**while**(j < n2){

      arr3[k++] = arr2[j++];

    }

      // sort the whole array arr3

      sort(arr3, arr3+n1+n2);

}

// Driver code

**int** main()

{

**int** arr1[] = {1, 3, 5, 7};

**int** n1 = **sizeof**(arr1) / **sizeof**(arr1[0]);

**int** arr2[] = {2, 4, 6, 8};

**int** n2 = **sizeof**(arr2) / **sizeof**(arr2[0]);

**int** arr3[n1+n2];

    mergeArrays(arr1, arr2, n1, n2, arr3);

    cout << "Array after merging" <<endl;

**for** (**int** i=0; i < n1+n2; i++)

        cout << arr3[i] << " ";

**return** 0

}

Output:-

