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| --- |
| #include <iostream> |
|  | using namespace std; |
|  |  |
|  | //Function to merge two arrays |
|  | void mergeArrays(int arrayThree[], int arrayOne[], int sizeOne, int arrayTwo[], int sizeTwo) { |
|  | for (int i = 0; i < sizeOne + sizeTwo; i++) { |
|  | if (i < sizeOne) { |
|  | arrayThree[i] = arrayOne[i]; |
|  | } |
|  | else { |
|  | arrayThree[i] = arrayTwo[i-sizeOne]; |
|  | } |
|  | cout << arrayThree[i] << " "; |
|  | } |
|  | } |
|  |  |
|  | //Function to find the largest element |
|  | int largest(int arrayOne[], int sizeOne, int arrayTwo[], int sizeTwo) { |
|  | int x = arrayOne[0]; |
|  | for (int i = 0; i <= (sizeOne + sizeTwo - 1); i++) { |
|  | if (i < sizeOne) { |
|  | if (x < arrayOne[i]) { |
|  | x = arrayOne[i]; |
|  | } |
|  | } |
|  | else { |
|  | if (x < arrayTwo[i-sizeOne]) { |
|  | x = arrayTwo[i-sizeOne]; |
|  | } |
|  | } |
|  | } |
|  | return x; |
|  | } |
|  |  |
|  | //Function to find the smallest element |
|  | int smallest(int arrayOne[], int sizeOne, int arrayTwo[], int sizeTwo) { |
|  | int x = arrayOne[0]; |
|  | for (int i = 0; i <= (sizeOne + sizeTwo - 1); i++) { |
|  | if (i < sizeOne) { |
|  | if (x > arrayOne[i]) { |
|  | x = arrayOne[i]; |
|  | } |
|  | } |
|  | else { |
|  | if (x > arrayTwo[i-sizeOne]) { |
|  | x = arrayTwo[i-sizeOne]; |
|  | } |
|  | } |
|  | } |
|  | return x; |
|  | } |
|  |  |
|  | int main() { |
|  |  |
|  | int sizeOne, sizeTwo; |
|  | cout << "Enter the size of the first array: "; |
|  | cin >> sizeOne; |
|  | cout << "Enter the size of the second array: "; |
|  | cin >> sizeTwo; |
|  |  |
|  | int arrayOne[sizeOne], arrayTwo[sizeTwo], arrayThree[sizeOne + sizeTwo]; |
|  |  |
|  | for (int i = 0; i <= sizeOne - 1; i++) { |
|  | cout << "Enter element number " << i+1 << " of the first array: "; |
|  | cin >> arrayOne[i]; |
|  | } |
|  |  |
|  | for (int i = 0; i <= sizeTwo - 1; i++) { |
|  | cout << "Enter element number " << i+1 << " of the second array: "; |
|  | cin >> arrayTwo[i]; |
|  | } |
|  |  |
|  | cout << "The elements of the merged array are "; |
|  | mergeArrays(arrayThree, arrayOne, sizeOne, arrayTwo, sizeTwo); |
|  | cout << endl; |
|  | cout << "The largest element is " << largest(arrayOne, sizeOne, arrayTwo, sizeTwo) << endl; |
|  | cout << "The smallest element is " << smallest(arrayOne, sizeOne, arrayTwo, sizeTwo) << endl; |
|  |  |
|  | return 0; |
|  | } |