**Shell sort**

#include <iostream>﻿using namespace std;﻿// Shell Sort function﻿void shellSort(int arr[], int n) {﻿    // Start with a big gap, then reduce the gap﻿    for (int gap = n / 2; gap > 0; gap /= 2) {﻿        // Perform a gapped insertion sort﻿        for (int i = gap; i < n; i++) {﻿            int temp = arr[i];﻿            int j;﻿            // Shift earlier gap-sorted elements up until the correct location for arr[i] is found﻿            for (j = i; j >= gap && arr[j - gap] > temp; j -= gap) {﻿                arr[j] = arr[j - gap];﻿            }﻿            // Put temp (the original arr[i]) in its correct location﻿            arr[j] = temp;﻿        }﻿    }﻿}﻿// Function to print an array﻿void printArray(int arr[], int n) {﻿    for (int i = 0; i < n; i++)﻿        cout << arr[i] << " ";﻿    cout << endl;﻿}﻿// Main function﻿int main() {﻿    int arr[] = {23, 12, 1, 8, 34, 54, 2, 3};﻿    int n = sizeof(arr) / sizeof(arr[0]);﻿    cout << "Original array: ";﻿    printArray(arr, n);﻿    shellSort(arr, n);﻿    cout << "Sorted array: ";﻿    printArray(arr, n);﻿    return 0;﻿}