**#include <bits/stdc++.h>**

**using namespace std;**

**void merge(vector<int> &arr, int l, int m, int r) {**

**vector<int> left(arr.begin() + l, arr.begin() + m + 1);**

**vector<int> right(arr.begin() + m + 1, arr.begin() + r + 1);**

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

**while (i < left.size() && j < right.size()) {**

**if (left[i] <= right[j]) {**

**arr[k++] = left[i++];**

**}**

**else {**

**arr[k++] = right[j++];**

**}**

**}**

**while (i < left.size()) arr[k++] = left[i++];**

**while (j < right.size()) arr[k++] = right[j++];**

**}**

**void mergesort(vector<int> &arr, int l, int r) {**

**if (l < r) {**

**int m = l + (r - l) / 2; // Fixed calculation**

**mergesort(arr, l, m);**

**mergesort(arr, m + 1, r);**

**merge(arr, l, m, r);**

**}**

**}**

**int main() {**

**vector<int> orders = {20230921, 20230920, 20230922, 20230919, 20230925};**

**mergesort(orders, 0, orders.size() - 1);**

**cout << "Sorted Orders:\n";**

**for (int t : orders) {**

**cout << t << " ";**

**}**

**cout << endl;**

**return 0;**

**}**