

```
1 #pragma once
2
3 /*
4 ** Insertion sort, heap sort, and quick sort algorithms
5 ** From "Introduction to Algorithms" by Thomas H. Cormen,
6 ** Selection sort, Singleton's sort, and Tree Sort 3
7 ** From "Sorting and Sort Systems" by Harold Lorin
8 ** Sorts for long doubles and long longs
9 ** Visual Studio 2019 Dynamic Link Library (DLL)
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12 */
13
14 #define DLL_Export __declspec(dllexport)
15
16 DLL_Export void LDInsertionSort(long double a[], int n);
17 DLL_Export void LDSelectionSort(long double a[], int n);
18 DLL_Export void LDHeapSort(long double a[], int n);
19 DLL_Export void LDQuickSort(long double a[], int n);
20 DLL_Export void LDSingletonsSort(long double a[], int n);
21 DLL_Export void LDTreeSort3(long double a[], int n);
22 DLL_Export void LLInsertionSort(long long a[], int n);
23 DLL_Export void LLSelectionSort(long long a[], int n);
24 DLL_Export void LLHeapSort(long long a[], int n);
25 DLL_Export void LLQuickSort(long long a[], int n);
26 DLL_Export void LLSingletonsSort(long long a[], int n);
27 DLL_Export void LLTreeSort3(long long a[], int n);
28
29 /* https://www.geeksforgeeks.org/c-program-for-binary-search-recursive-and-iterative/ */
30
31 DLL_Export int LDBinarySearch(long double arr[], int l,
32     int r, long double x);
33 DLL_Export int LLBinarySearch(long long arr[], int l,
34     int r, long long x);
35
```