TVJ_Sort

It provides many kinds of sort functions for STL library containers (and also those containers supporting `iterator`s) and arrays.

Functions

The table below provides the table of parameters functions support.

Functions	Normal Array Pointers	STL Containers	STL Containers iterators	STL Containers and their iterators
bubble_sort	●	○	○	✕
insertion_sort	●	○	○	✕
quick_sort	●	○	✕	○
quick_sort_pro	●	○	○	✕
quick_sort_pro_safe	●	○	○	✕
heap_sort	●	●	●	✕
LSD_sort	✕	○	✕	✕
LSD_sort_pro	✕	○	✕	✕
LSD_sort_pro_heap1	✕	○	✕	✕
LSD_sort_pro_heap2	✕	○	✕	✕
MSD_sort	✕	○	✕	✕
MSD_sort_pro	✕	○	✕	✕
(STL sort)	●	✕	○	✕

> Note: ● means support, ✕ means no support, ○ means support some.

The following table gives the STL container that functions support.

Functions	vector	deque	list	forward_list	array
bubble_sort	●	●	✕	✕	●
insertion_sort	●	●	✕	✕	●
quick_sort	●	●	✕	✕	●
quick_sort_pro	●	●	✕	✕	●
quick_sort_pro_safe	●	●	✕	✕	●
heap_sort	●	●	●	●	●

Functions	vector	deque	list	forward_list	array
LSD_sort	●	●	×	×	×
LSD_sort_pro	●	●	×	×	×
LSD_sort_pro_heap1	●	●	×	×	●
LSD_sort_pro_heap2	●	●	×	×	×
MSD_sort	●	●	×	×	×
MSD_sort_pro	●	●	×	×	×
(STL sort)	●	●	×	×	●

> Note: ● means support, × means no support.

Note

- LSD_sort, LSD_sort_pro, LSD_sort_pro_heap1, LSD_sort_pro_heap2, MSD_sort, MSD_sort_pro only supports integer elements (Including int, long long, unsigned char and etc.).
- Using STL container iterators, container element has to be specified in the function.
- Here are two sample .cpp files, which can be an easy introduction to TVJ_Sort.
- This project uses TVJ_Timer.h in my repository TVJ_Timer.

Notice for Developers

- The sorting method is still under developing. Now the focus is on the support on list or forward_list (This can be achieved, as is shown in my repository TVJ_Forward_List)