Dry part:

- 1) a) typename T has to have a copy C'tor in order for the sorted list to make its own copies of the elements and be independent from the user memory wise.
 - b) it has to have an operator< in order to sort the list.
 - c) a D'tor
- 2) if we do not return a const T&, the user can change the value of the element and that may cause the sorted list to be unsorted.
- 3) way 1) using function pointers.

way 2) using function objects.

the difference is that a function object is a class with an overloaded operator(), which acts like a function when called (except maybe when initializing the object).

a function pointer is a pointer that can hold the address of a function, and dereferencing it gives the function which can be called normally by using ();

we do not need to provide two different implementations for each case because an implementation that's based on using operator() works on both.