

Goal

This is a follow-up exercise to `selection_sort`. Here we push the idea of generic programming one step further.

In this exercise you are given a filename as input and you need to read its content and then output a sorted version of this content. To do so, we will load the file into a container, then use `my_selection_sort` to sort the container. Note that, in order to spice things up, the type of container that has to be used is defined within the input file. This input file has the following format:

```
[iufdcs] value type
[lvd] container type
value0
value1
value2
...
```

The first line contains a char corresponding to the type of the values:

i	integer
u	unsigned integer
f	float
d	double
c	char
s	std::string

The second line corresponds to the type of container that HAS to be used for sorting:

l	std::list
v	std::vector
d	std::deque

All other lines correspond to values (one value per line).

Your program must then create a new file with the name "sorted_values.txt" containing the value type, the container type and the sorted values:

```
[iufdcs] (copied) value type
[lvd] (copied) container type
sorted value0
sorted value1
sorted value2
...
```

Restrictions

You may not include *algorithm* or use any other third party lib. You must use your `selection_sort` algorithm implemented in the last exercise. You must use generic implementations, you can stick to the proposed prototypes or design your own layout.

Challenge

Implementations faster than our (suboptimal but not bad) reference implementation get extra points.

Bonus

Another bonus is given to an implementation if it is at least 10% faster than any of the other implementations (including our reference implem)