Comparison of sorting algorithms via Visualization

Boranbayev Daulet 21MD0234

Turdaleyev Azamat Farabi 21MD0241
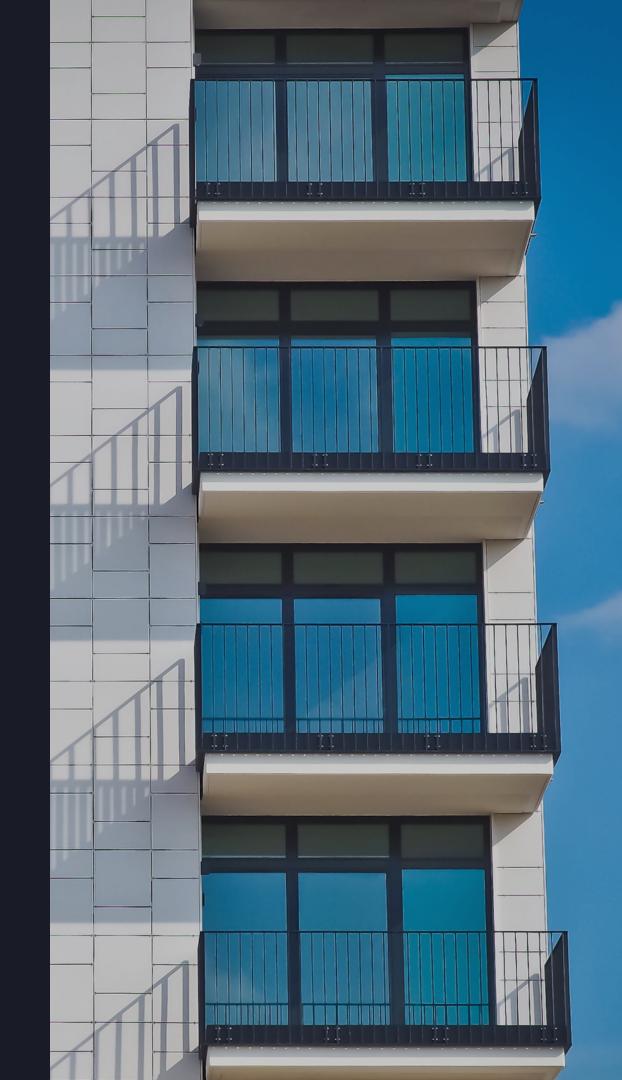
We took the three most popular sorting algorithms:

- BUBBLE SORT

- COCKTAIL SORT

- SELECTION SORT

BUBBLE SORT

The idea of sorting is very simple, one by one the neighboring elements of the list are compared, if the first compared element is larger than the second, we swap their places. Thus, the highest items are moved to the end (pop up).
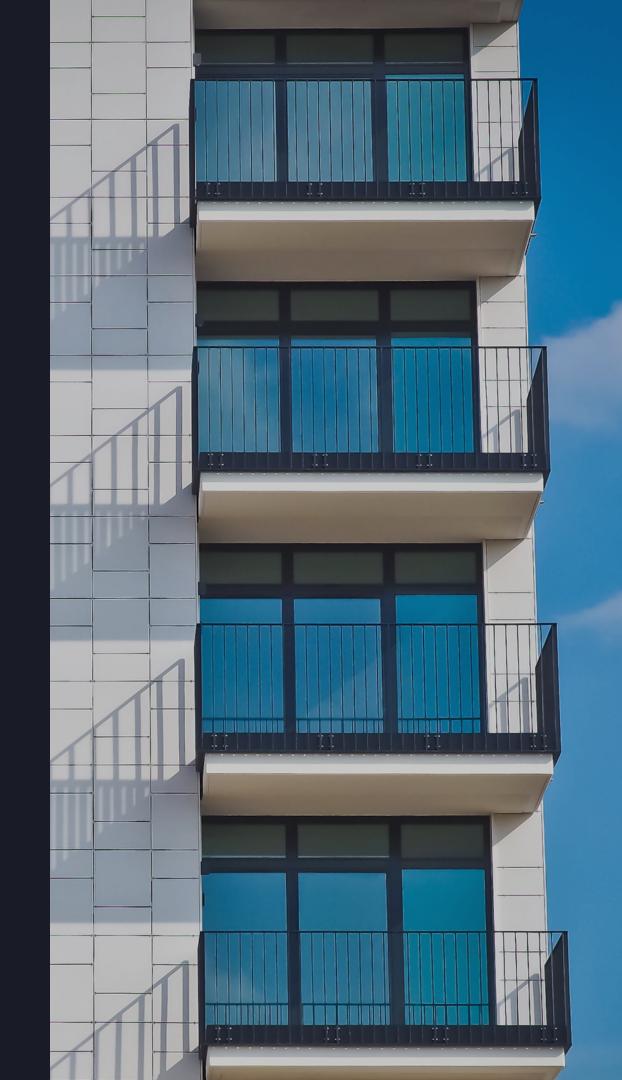
COCKTAIL SORT

Shuffle sorting is similar to bubble sorting, during bubble sorting we move only one way, while shuffle sorting moves both ways, so the largest items move to the end and the smallest items move to the beginning.

SELECTION SORT

In the list the smallest element is searched, then its position changes with the first unsorted position, in the next iteration the search does not include the sorted list. In this way the whole list is sorted.

Tasks

- Principle of operation

- Comparison analysis

- Visualization