- 1. dynamic selection.  $O(n \frac{\log n}{\log \log n})$  per operation [1]. 2. use two heaps.  $O(\operatorname{sort}(n))$ .

## References

[1] Paul F Dietz. Optimal algorithms for list indexing and subset rank. In Workshop on Algorithms and Data Structures, pages 39–46. Springer, 1989.