Programming 3 - WVA 2023-24

4/2 Homework - Question 3

Garud Shah

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1 Discussion

The $O(1)$ memory complexity and stability are obvious buffs. However, these buffs are destroyed by its $O(n^2)$ time complexity. As previously mentioned:
"... sorting is only very useful if the sorting algorithims time complexity is under $O(n^2)$"
I know this is true, especially where that $O(n)$ getting converted to $O(\log n)$ really matters, like in USACO problems that utilize sorting. This severly limits the use of this algorithim.

2 Algorithim Grade

Because it is not very useful due to its high time complexity, but posesses some important features such as stability and low memory complexity, this algorithim gets a **B**.