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1. Compare Greedy method and dynamic programming

To solve the optimization problem in computing the two methods namely greedy and dynamic programming used. The ~~pot~~ solution produced by the greedy algorithms are more effective than the dynamic programming solutions. The primary difference between the greedy method and dynamic programming is that greedy method ~~just~~ generates only one decision sequence. As against, dynamic programming can produce many decision sequence

2. Real-time Applications of different sorting method.

Quick Sort

Sports scores are organised by quick sort on the basis of win-loss ration

time complexity = $O(n \log n)$ best case

Heap Sort

Heap sort is used in reading barcodes on plastic cards. The service allows to communicate with the database to constantly run checks to ensure that they were all still online and had to report constantly.

time complexity = $O(n \log n)$ best case

Merge Sort

Databases use an external merge sort to sort sets of data that are too large to be loaded entirely into memory. The driving factor in this sort is the reduction in the number of disk I/Os.

$$\text{Time complexity} = O(n \log n)$$

Bubble Sort

Used in programming tv remote to sort channels on the basis of viewing time.

$$\text{Time complexity} = O(n^2)$$

Insertion Sort

Great for small or mostly sorted arrays.

$$\text{Time complexity} = O(n^2)$$

Selection sort

K12 education portal allows sorting list of pupils alphabetically through

selection sort.

$$\text{Time complexity} = O(n^2)$$

selection, bubble, and insertion sorts are not a suggested sorting techniques for large databases because it have $O(n^2)$ time complexity.