sorting algorithms

advantages and disadvantages

# Bubble Sort

Bubble sorting algorithm is one of the most common sorting algorithms. It works by repeatedly swapping adjacent elements that weren’t in order until the list of items is in sequence. (Shown in Appendix A) A good way to explain bubble that a found “You can imagine that on every step big bubbles float to the surface and stay there. At the step, when no bubble moves, sorting stops” (*Bubble Sort*. Retrieved from algolist, 2009).

The main advantage of bubble sort is easy to implement and easy to understand. Therefore, it’s mainly suitable for teaching but not really for real-life applications. The disadvantage bubble sort is the fact that it can’t deal with list containing huge numbers of items this is due to it requiring n -squared processing steps for every n number of elements to be sorted.

# Pancake Sort

Pancake sort idea is to sort a disordered stack of pancakes in order of size by using a spatula to insert at any point in the stack and use it to flip all pancakes above it. This means that it is to order the elements by flipping the largest element to the end of the list then repeat until the list is in order to have an ascending order list. (Shown in Appendix B)

The main disadvantage of pancake sort is that it’s not the quickest solution. The memory and run time that is required is O(n) and O(n2), N being the list length. Due to the data that I obtain by *Austin, Pancake Sort* I can see it wouldn’t work well sorting a large list.

# Quick Sort

# References

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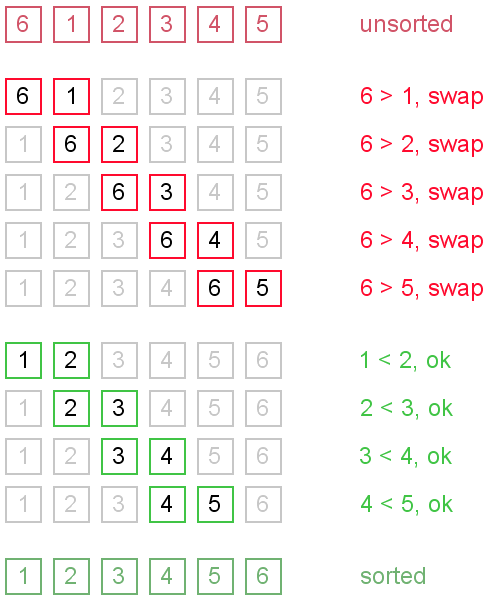
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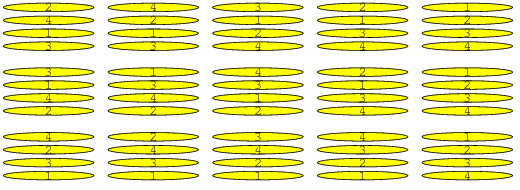
# Appendix

## Appendix A – Bubble Sort



Bubble Sort. Retrieved from algolist: http://www.algolist.net/Algorithms/Sorting/Bubble\_sort

## Appendix A –Pancake Sort



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