Sorting Algorithms

Nic Ross

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1 Introduction

https://en.wikipedia.org/wiki/Sorting_algorithm
http://corte.si/posts/code/visualisingsorting/index.html

2 Bubble sort and variants

2.1 Useful Links (Python)

http://interactivepython.org/runestone/static/pythonds/SortSearch/TheBubbleSort.html
http://stackoverflow.com/questions/895371/bubble-sort-homework
http://www.geekviewpoint.com/python/sorting/bubblesort
http://code.runnable.com/Uq-rzlBorMJKAASF/algorithms-bubble-sort-python

	Best	Worst	Average	Memory	Stable	Method
Simple sorts						
Insertion sort	$\mathcal{O}(n)$	$\mathcal{O}(n^2)$	$\mathcal{O}(n^2)$	1	Yes	Insertion
Selection sort	$\mathcal{O}(n^2)$	$\mathcal{O}(n^2)$	$\mathcal{O}(n^2)$	1	No	Selection
Efficient sorts						
Merge sort	$n\log n$	$n\log n$	$n\log n$	n	Yes	Merging
Heapsort						
Quicksort						
Bubble sort and variants						
Bubble sort	$\mathcal{O}(n)$	$\mathcal{O}(n^2)$	$\mathcal{O}(n^2)$	1	Yes	Exchanging
Shell sort						
Comb sort						
Distribution sorts						
Counting sort						
Bucket sort						
Radix sort						

Table 1: Caption