

Selection Sort

n	$\frac{\text{Count}}{n}$	$\frac{\text{Count}}{n^2}$	$\frac{\text{Count}}{n^3}$
10	4.4	0.44	0.044
100	49.49	0.4949	4.949×10^{-3}
500	249.498	0.498	9.979×10^{-4}
1000	499.499	0.499	4.99×10^{-4}

Merge Sort

n	$\frac{\text{Count}}{n}$	$\frac{\text{Count}}{n^2}$	$\frac{\text{Count}}{n^3}$
10	2.1	0.21	0.63
100	5.39	0.053	0.811
500	7.71	0.015	0.860
1000	8.721	0.0087	0.875

Quick Sort

n	$\frac{\text{Count}}{n}$	$\frac{\text{Count}}{n^2}$	$\frac{\text{Count}}{n^3}$
10	2.6	0.26	0.026
100	7.22	0.0722	7.2×10^{-4}
500	9.3	0.018704	3.74×10^{-5}
1000	11.667	0.011	1.16×10^{-5}



C:\Benarji\SelectionSort.exe



Enter the length of the array:4

Enter the element array:9761

3116

5612

1910

Number of times the basic operation is performed is 5

the sorted array is

1910

3116

5612

9761



C:\Benarji\merge_sort.exe



Enter the number of elements: 5

Enter those elements : 2

3

1

4

6

Sorted array is :1 2 3 4 6

Process exited after 11.25 seconds with return value 0

Press any key to continue . . . |



C:\Benarji\quick_sort.exe



Enter the number of elements: 6

Original array: 37 19 9 77 26 97

Sorted array: 9 19 26 37 77 97

Number of basic operations: 11

Process exited after 3.034 seconds with return value 0

Press any key to continue . . . |