Sorting

Сортировка	Примерное время работы в microseconds per operation (среднее время)		
	Средний случай	Лучший случай	Худший случай
N = 10^4			
Insertion sort	21365,196 (19497,085)	5,927 (5,667)	37397,648 (37734,176)
Insertion sort & binary search	15700,062 (15764,703)	478,305 (526,903)	26249,171 (26874,783)
Shell sort	1595,059 (1497,305)	52,673 (56,049)	-
Merge sort	2213,399 (2337,561)	942,863 (929,334)	-
In-place merge sort	72283,681 (70642,685)	139,139 (132,593)	-
Quick sort	1377,516 (1314,025)	314,622 (308,388)	628,785 (606,678)
Quick sort & random pivot & three parts	1740,197 (1828,185)	1339,922 (1205,049)	-
Ordered statistic	162,000 (137,375)	54,238 (51,699)	-
Ordered statistic & O(n)/worst case	614,619 (586,442)	211,385 (197,940)	-
Quick sort & binary numbers	1575,239 (1597,610)	462,506 (463,385)	-
MSD & binary numbers	2558,392 (2431,309)	2648,577 (2521,750)	2534,175 (2484,865)
MSD & strings	5491,923 (4068,629)	3504,929 (2676,595)	-
LSD & long numbers	733,844 (738,304)	-	-
N = 5 * 10^4			
Insertion sort	534485,239 (500021,609)	29,175 (28,723)	945725,179 (921987,115)
Insertion sort & binary search	364024,899 (368579,707)	2972,150 (2991,121)	695867,295 (716328,547)
Shell sort	9530,371 (9544,106)	319,937 (333,877)	-
Merge sort	14254,240 (12629,536)	4943,565 (4920,622)	-
In-place merge sort	1598483,200 (1630328,281)	718,852 (718,108)	-
Quick sort	7584,562 (7314,037)	1762,438 (1798,236)	3814,541 (3686,490)
Quick sort & random pivot & three parts	9407,118 (9357,234)	6735,140 (6184,891)	-
Ordered statistic	764,580 (823,794)	229,445 (260,253)	-
Ordered statistic & O(n)/worst case	3030,240 (2964,667)	833,499 (913,661)	-
Quick sort & binary numbers	8700,195 (9104,347)	2319,918 (2388,608)	-
MSD & binary numbers	13000,695 (11519,040)	12791,367 (12965,889)	12618,216 (13001,851)
MSD & strings	36024,929 (29424,355)	33695,608 (19139,698)	-
LSD & long numbers	4290,166 (4118,076)	-	-
N = 10^5			
Insertion sort	1880787,888 (1867211,626)	58,36 (57,701)	3869456,886 (3784296,981
Insertion sort & binary search	1542250,331 (1508689,629)	6295,551 (6382,529)	2953865,931 (2935156,809
Shell sort	21095,621 (21214,282)	681,678 (694,846)	-
Merge sort	26434,268 (26322,636)	10619,315 (10642,355)	-
In-place merge sort	6458716,523 (6607518,052)	1570,649 (1597,374)	-
Quick sort	15886,475 (15330,882)	3737,995 (3650,120)	11247,675 (9399,215)
Quick sort & random pivot & three parts	21606,976 (21606,976)	12736,410 (13722,218)	-
Ordered statistic	1428,542 (1579,744)	449,017 (446,108)	-
Ordered statistic & O(n)/worst case	5840,672 (5714,376)	1613,273 (1621,107)	-
Quick sort & binary numbers	18546,482 (19148,188)	4777,248 (4805,182)	-
MSD & binary numbers	24093,096 (23440,747)	25081,197 (24872,693)	26609,324 (24737,110)
MSD & strings	58809,130 (50555,040)	63028,288 (31176,346)	-
LSD & long numbers	8432,792 (8450,381)	-	-