

# REPORT LAB9

Time in milliseconds		
Questions	Time( $10^5$ )	comments
1_a	18.0354	simple merge sort
1_b	16.1799	merge sort with technique 1
1_c	15.6135	merge sort with technique 1,2
1_d	17.012	merge sort with technique 1,2,3
1_e	15.225	merge sort with technique 4
1_f	250.2	bottom up merge sort with $10^4$ elements
2_a	15.3045	quick sort with 1 <sup>st</sup> element as pivot
2_b	16.4021	quick sort with median as pivot

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Time in milliseconds					comments
	$10^3$	$10^4$	$10^5$	$10^6$	
3_a	0.605	59.439	7239.85	-	more than 15 mins insertion sort
3_b	3.347	120.313	10558.2	-	more than 15 mins selection sort
3_c	9.023	268.419	29898.8	-	more than 15 mins bubble sort
3_d	0.54	3.552	15.225	200.54	merge sort with 4 optimizations
3_e	0.254	3.897	16.4021	177.036	quick sort with median as pivot
3_f	0.2944	2.2467	17.4721	199.082	sort function in STL