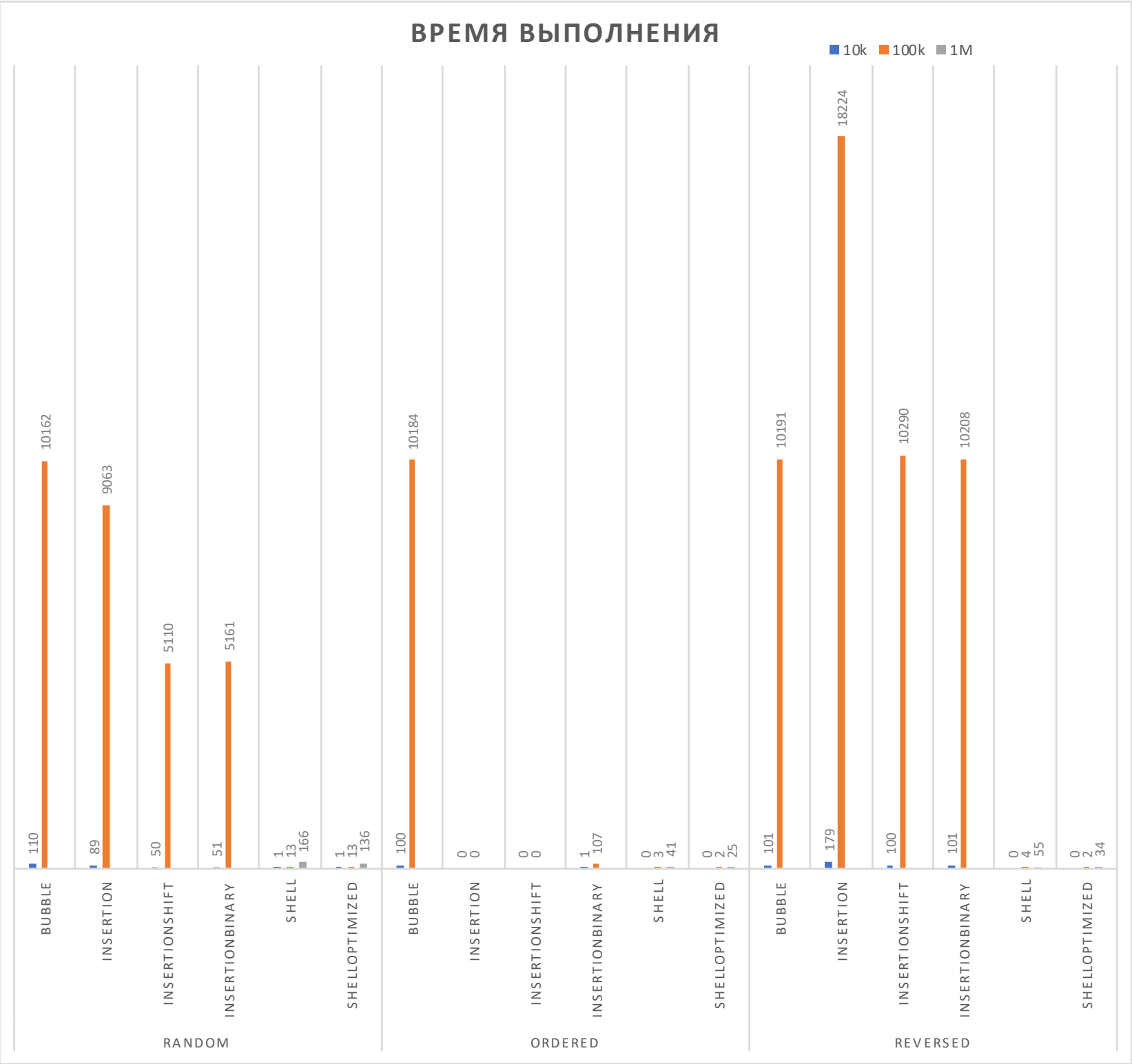


TIME ESTIMATION

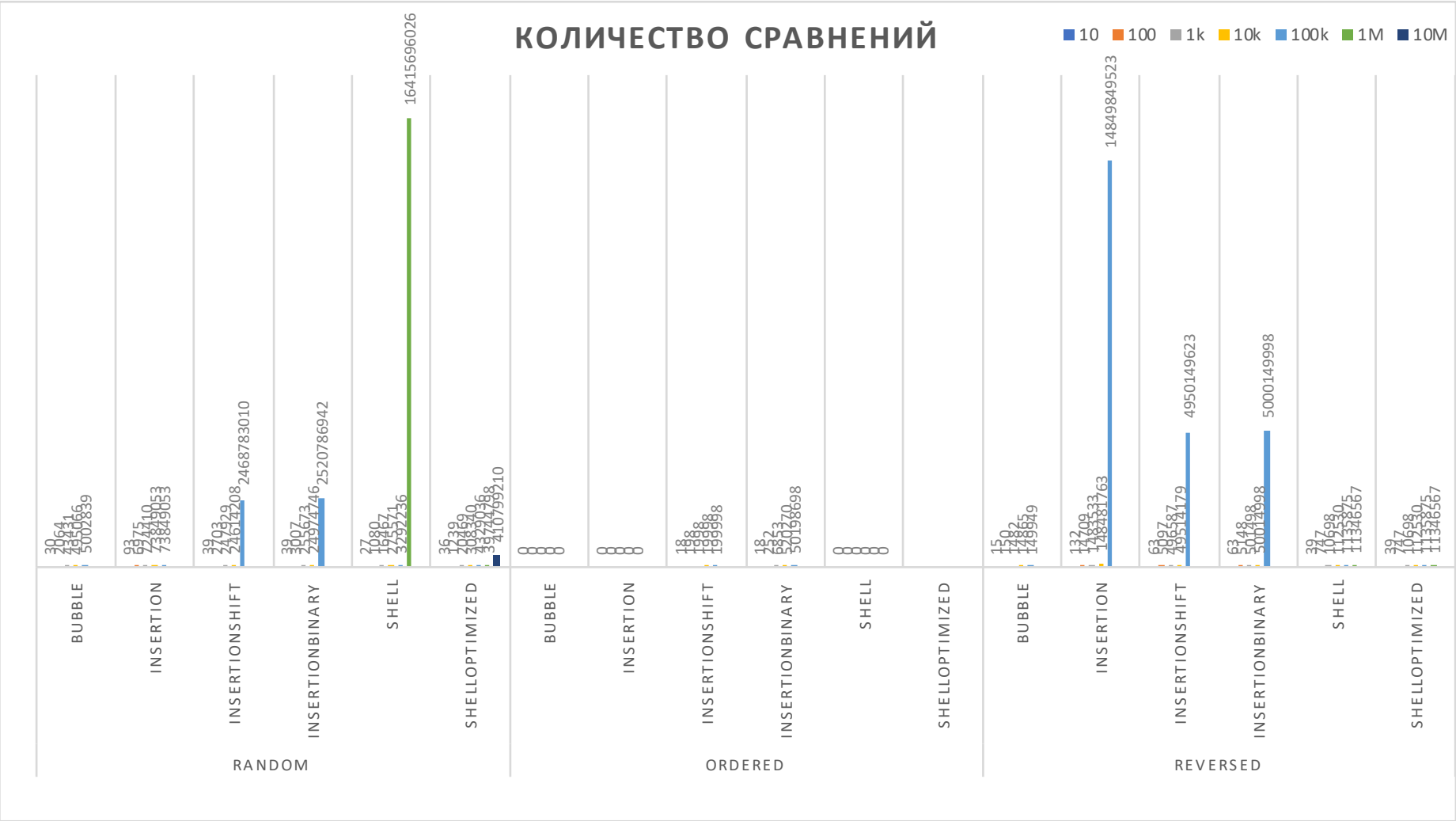
		array size						
		10	100	1k	10k	100k	1M	10M
Random	Bubble	0	0	1	110	10162		
	Insertion	0	0	1	89	9063		
	InsertionShift	0	0	0	50	5110		
	InsertionBinary	0	0	0	51	5161		
	Shell	0	0	0	1	13	166	
	ShellOptimized	0	0	0	1	13	136	1427
Ordered	Bubble	0	0	1	100	10184		
	Insertion	0	0	0	0	0		
	InsertionShift	0	0	0	0	0		
	InsertionBinary	0	0	0	1	107		
	Shell	0	0	0	0	3	41	
	ShellOptimized	0	0	0	0	2	25	302
Reversed	Bubble	0	0	1	101	10191		
	Insertion	0	0	1	179	18224		
	InsertionShift	0	0	0	100	10290		
	InsertionBinary	0	0	1	101	10208		
	Shell	0	0	0	0	4	55	
	ShellOptimized	0	0	0	0	2	34	379



Model Name: MacBook Pro  
Model Identifier: MacBookPro18,2  
Chip: Apple M1 Max  
Total Number of Cores: 10 (8 performance and 2 efficiency)  
Memory: 32 GB

COMPARISONS

		array size	10	100	1k	10k	100k	1M	10M
Random	Bubble		30	2064	43431	495066	5002839		
	Insertion		93	6975	724410	73849053	73849053		
	InsertionShift		39	2703	247929	24614208	2468783010		
	InsertionBinary		39	3007	255673	24974746	2520786942		
	Shell		27	1080	16467	275571	3292236	16415696026	
	ShellOptimized		36	1239	20469	308340	4329036	39744798	410799210
Ordered	Bubble		0	0	0	0	0		
	Insertion		0	0	0	0	0		
	InsertionShift		18	198	1998	19998	199998		
	InsertionBinary		18	252	6853	520270	50198698		
	Shell		0	0	0	0	0	0	
	ShellOptimized								
Reversed	Bubble		15	150	1482	14865	149949		
	Insertion		132	14709	1483533	148481763	14849849523		
	InsertionShift		63	5097	496587	49514179	4950149623		
	InsertionBinary		63	5148	501498	50014998	5000149998		
	Shell		39	747	10698	112530	1135875	11346567	
	ShellOptimized		39	747	10698	112530	1135875	11346567	



Model Name: MacBook Pro  
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ASSIGNMENTS

	array size	10	100	1k	10k	100k	1M	10M
Random	Bubble	45	4950	499500	49995000	4999950000		
	Insertion	31	235	241470	24616351	2485003771		
	InsertionShift	28	2602	246926	24604207	2468683005		
	InsertionBinary	14	452	7760	110591	1440343		
	Shell	9	360	5492	91857	1097412	13856534	
	ShellOptimized	12	413	6823	102780	1443012	13248266	136933070
Ordered	Bubble	45	4950	499500	49995000	4999950000		
	Insertion	0	0	0	0	0		
	InsertionShift	9	99	999	9999	99999		
	InsertionBinary	16	472	7836	110685	1440506		
	Shell	0	0	0	0	0	0	0
	ShellOptimized	0	0	0	0	0	0	0
Reversed	Bubble	45	4950	499500	49995000	4999950000		
	Insertion	44	4903	494511	49493921	4949949841		
	InsertionShift	45	4538	495489	9999	4950049525		
	InsertionBinary	13	417	7476	107727	1403411		
	Shell	13	249	3566	37510	378625	3782189	
	ShellOptimized	13	207	2853	32450	231766	2540300	22004119

