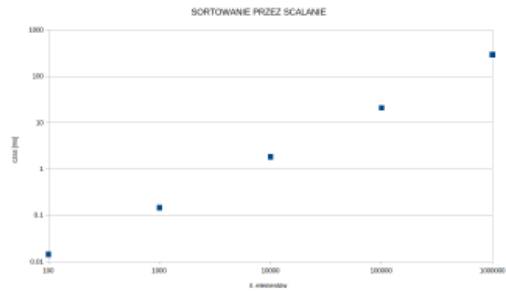
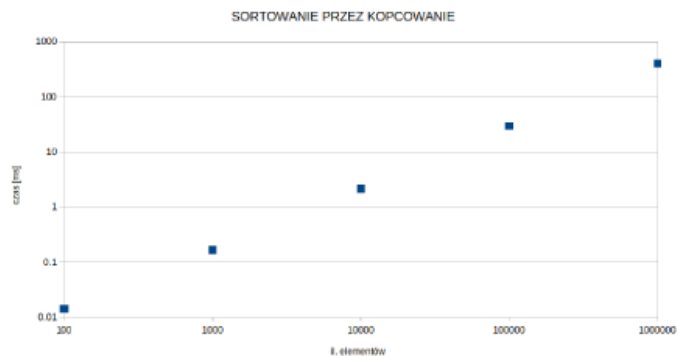


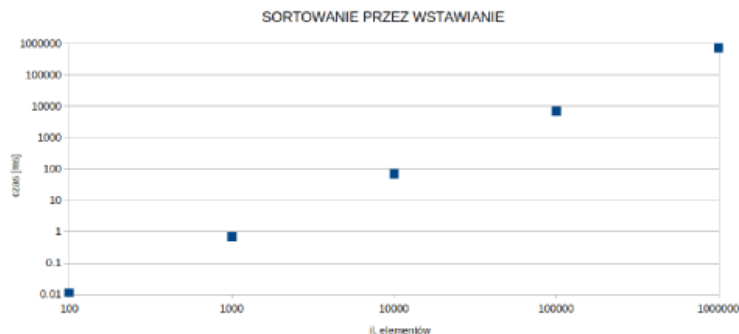
Sortowanie przez scalanie												
il. elementów	TEST										ŚREDNIA	
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10		
	100	0.01837	0.014288	0.014167	0.013893	0.013803	0.01352	0.013946	0.013693	0.013523		0.013645
	1000	0.157116	0.143555	0.141228	0.150853	0.141647	0.141409	0.142795	0.138773	0.160305		0.14118
	10000	1.72824	1.70914	1.711	1.6963	1.71274	2.26465	2.23139	1.70495	1.70622		1.71007
	100000	21.2311	20.6675	20.6775	20.7498	20.7967	21.9523	20.7222	20.613	20.6573		21.2378
	1000000	308.178	275.082	287.687	347.513	339.044	305.183	300.505	262.255	254.903		256.216



Sortowanie przez kopcowanie												
il. elementów	TEST											
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	ŚREDNIA	
	100	0.015052	0.014336	0.01456	0.013618	0.014291	0.01387	0.013393	0.012852	0.01396	0.01646	0.0142392
	1000	0.173698	0.16906	0.16472	0.161599	0.160892	0.162503	0.162977	0.200355	0.166826	0.163596	0.1685216
	10000	2.15119	2.15114	2.14471	2.13481	2.14527	2.13687	2.13227	2.14062	2.14165	2.14641	2.142494
	100000	32.1805	30.0123	34.076	28.1924	27.8729	28.1855	29.0904	28.9524	28.9344	28.9061	29.64029
	1000000	421.983	409.097	400.411	393.85	405.612	391.254	391.002	392.707	393.936	392.517	399.2369



Sortowanie przez wstawianie												
TEST												
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	ŚREDNIA	
il. elementów	100	0.011507	0.01184	0.010624	0.012614	0.012295	0.011171	0.011122	0.010732	0.010608	0.011868	0.0114381
	1000	0.706655	0.700808	0.704027	0.720059	0.732163	0.681946	0.745248	0.708758	0.713888	0.711632	0.7125184
	10000	68.364	68.7717	75.5952	71.5786	68.987	71.6225	71.926	69.775	70.6329	71.1496	70.84025
	100000	7009.24	6996.99	6959.94	6911.99	6872.82	6874.97	6900.11	6893.86	6924.28	6944.28	6928.848
	1000000	718943	734105	739236	755493	721289	732542	755091	721451	733290	722165	733360.5



Źródła:

<https://www.geeksforgeeks.org/insertion-sort/>
<https://learning.oreilly.com/library/view/c-data-structures/9781788835213/>
<https://www.programiz.com/dsa/heap-sort>
<https://www.geeksforgeeks.org/heap-sort/>
<https://www.youtube.com/watch?v=ijyUFvvdUg>
<https://www.youtube.com/watch?v=M2bKENbdnI4>

Wszystkie wykresy są w skali log-log

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241179