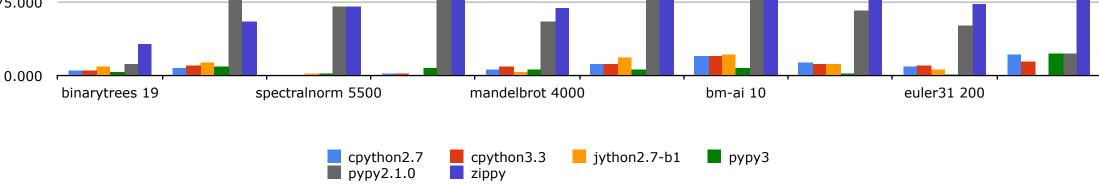
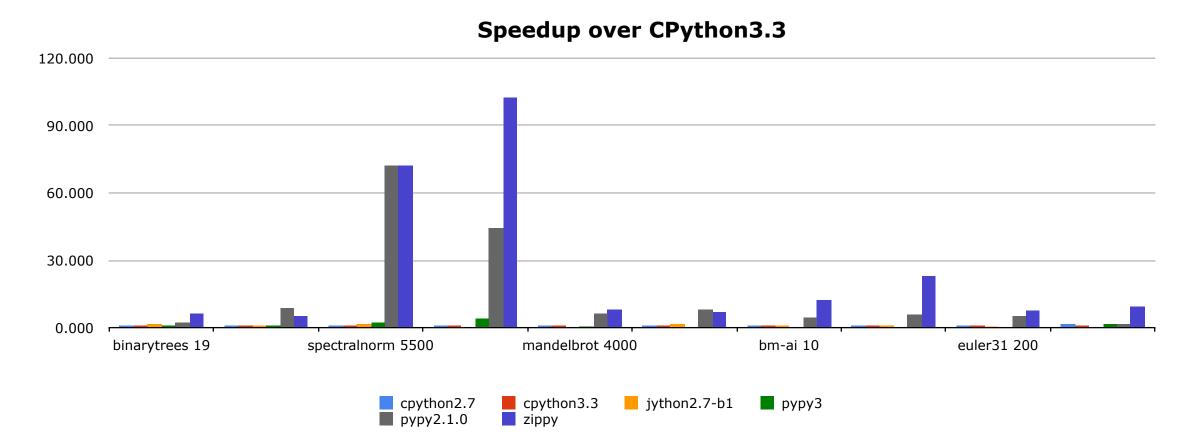
Generator benchn of all VMs		эрссиирэ													
penchmark	nqueens	euler11	euler31	eratos	lyndon	partitions	pymaging	python- graph	simplejson	sympy	whoosh	geomean			
CPython3	1.00				-										
CPython	2.12														
lython	2.14		0.64		+			0.54	1.23	0.71					
РуРу3	12.31	6.04	7.71	1.26	24.26	25.44	64.68	3.43	11.9	CPython §.	CPython 22:19	100 1 40,45,3 1	РуРу		
РуРу	11.95	5.07	8.38	1.14	24.54	24.62	59.03	3.34	19.0	ZipPy 5.78	34.79				
ZipPy	29.05	57.43	13.09	3.32	162.88	40.29	95.96	3.16			56.53	20.59			
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							"	queens	Culcisi	Tyride	руп	laging	Jimpiejson		70311
										CPvthon3 (CPython	n PvPv Pv	vPv3		
										ZipPy		, , , _ , ,	.,-		
							100								
Non-generator be	nchmarks: spee	dups of VMs													
benchmmark	CPython3	CPython	Jython	РуРу	РуРу3	ZipPy									
binarytrees	1	0.94	1.99	2.6	2.7	7.31									
fannkuchredux	1	0.97	0.51	44.53	47.29	87.5	75 —								
fasta	1	1.04	1.55	11.73	11.24	15.57							-		
mandelbrot	1	1.08	0.34	10.91	10.82	11.69									
meteor	1	1.02	0.77	2.64	2.62										
nbody	1	0.97	0.73	12.13	12.06	6.17	5 0								
 pidigits	1	1	0.62				_ 0								
spectralnorm	1	1.33				1									
float	1	0.95													
richards	1	0.94													
chaos	1	1.17										_			
deltablue	1	0.85		+											
go	1	1.08									L				
mean	1	1.00													
····Cuii	1	1.02	1.03	12.13	11.00	13.34	binar	ytrees	fasta	meteor	pidigits	float	chaos	5	go
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score	cpython2.7	cpython3.3	jython2.7-b1	руруЗ	pypy2.1.0	zippy	speedup	cpython2.7	cpython3.3	jython2.7-b1	руруЗ	pypy2.1.0	zippy		
binarytrees 19	4.130	5.035	8.808	3.688	11.281	32.495	binarytrees 19	0.820	1.000	1.749	0.733	2.240	6.453		
nbody 5000000	8.141	10.308	12.913	9.332	89.278	55.700	nbody 5000000	0.790	1.000	1.253	0.905	8.661	5.404		
spectralnorm 5500	1.026	0.976	1.546	2.271	70.537	70.600	spectralnorm 5500	1.051	1.000	1.584	2.327	72.264	72.329		
fannkuchredux 11	1.715	1.865	0.936	7.245	82.713	191.000	fannkuchredux 11	0.919	1.000	0.502	3.884	44.345	102.402		
mandelbrot 4000	6.845	8.743	2.838	5.794	54.735	68.400	mandelbrot 4000	0.783	1.000	0.325	0.663	6.260	7.823		
fasta 25000000	11.989	11.530	18.921	6.203	95.804	82.000	fasta 25000000	1.040	1.000	1.641	0.538	8.309	7.112		
bm-ai 10	19.440	19.500	20.800	7.000	94.000	236.280	bm-ai 10	0.997	1.000	1.067	0.359	4.821	12.117		
euler11 10000	12.500	11.640	10.980	1.900	66.600	268.640	euler11 10000	1.074	1.000	0.943	0.163	5.722	23.079		
euler31 200	8.520	9.740	5.840	1.400	51.020	72.580	euler31 200	0.875	1.000	0.600	0.144	5.238	7.452		
eratosthenes 100000	20.700	14.420	0.000	23.100	23.100	129.670	eratosthenes 100000	1.436	1.000	0.000	1.602	1.602	8.992		
					Scor	es									
300.000															
225.000															
150.000															
75.000										· '				'	





Execution time	e for obiect bo	ound benchm	arks				object storage allo	cations						
fixed storage 5									average exe tir	me of each obje	ct model config			
benchmarks	1	2	3	4	5	mean	fixed flexib	ole				evol		
float	3.577	3.374	3.227	3.109	3.256	3.309	3,168,003,888	0	float	3.309	3.110	3.194		
richards	0.984	1.010	1.123	0.905	1.178	1.040	11,989,584	0	richards	1.040	1.171	1.187		
chaos	4.865	4.836	4.863	4.963	5.304	4.966	30,501,652,896	0	chaos	4.966	4.354	4.346		
deltablue	1.391	1.129	1.210	1.198	1.212	1.228	620,934,480	0	deltablue	1.228	1.172	1.164		
go	1.072	1.004	0.995	0.979	0.999	1.010	336,672	0	go	1.010	0.998	1.033		
fixed storage 3									speedups of e	each object mo	odel config rela	ative to		
benchmarks	1	2	3	4	5 r	mean			benchmarks f	fixed flo	ex flex	evol		
float	3.335	3.324	3.327	3.278	3.563	3.365	2,464,003,024	0	float	1.00	1.06	1.04		
richards	1.200	1.094	1.176	1.028	1.016	1.103	9,325,232	0	richards	1.00	0.89	0.88		
chaos	5.036	5.134	4.927	4.846	4.964	4.981	23,723,507,808	0	chaos	1.00	1.14	1.14		
deltablue	1.133	1.215	1.229	1.128	1.265	1.194	482,949,040	0	deltablue	1.00	1.05	1.05		
go	1.123	1.106	1.089	1.072	1.082	1.094	261,856	0	qo	1.00	1.01	0.98		
30	1.123	1.100	1.005	1.072	11002	21051	201,000		mean	1.00	1.03	1.02		
fixed storage 1														
benchmarks	1	2	3	4	5 r	mean								
float	3.568	4.042	3.487	3.657	3.599	3.671	1,760,002,160	0						
richards	1.186	1.242	1.257	1.201	1.226	1.222	6,660,880	0						
chaos	5.442	5.298	5.123	5.085	5.177	5.225	16,945,362,720	0						
deltablue	1.229	1.222	1.261	1.321	1.163	1.239	379,459,960	0						
go	1.075	1.077	1.087	1.068	1.129	1.087	187,040	0						
		-					, , ,							
									storage alloca	ation of differe	ent fix sizes rel	lative to		
flex storage	ı								flex evol		ı			
benchmarks	1	2	3	4	5 r	mean			benchmarks	space fix1 sp	pace fix3 spa	ice fix5		
float	3.146	3.134	3.022	3.129	3.118	3.110	4,032 1,23	32,000,000	float	1.43	2.00	2.57		
richards	1.160	1.164	1.200	1.184	1.146	1.171	7,488	3,994,608	richards	1.67	2.33	3.00		
chaos	4.495	4.229	4.367	4.311	4.369	4.354	4,608 11,8	61,752,280	chaos	1.43	2.00	2.57		
deltablue	1.131	1.214	1.154	1.185	1.176	1.172	4,608 17	2,480,280	deltablue	2.20	2.80	3.60		
go	0.988	0.983	0.968	0.999	1.053	0.998	5,184	129,192	go	1.45	2.03	2.61		
									mean	1.63	2.23	2.87		
flex storage evo	.I								slowsdown of evol	f different fix	sizes relative t	o flex		
benchmarks	1	2	3	4	5 r	mean			benchmarks s	snace fix1	pace fix3 spa	ice fix5		
float	3.170	3.154	3.188	3.238	3.221	3.194	4,032 1,23	32 000 000	float	1.15	1.05	1.04		
richards	1.213	1.156	1.171	1.234	1.159	1.187		3,994,608	richards	1.03	0.93	0.88		
	4.336	4.245	4.261	4.383	4.504	4.346			chaos	1.03	1.15	1.14		
chaos							4,608 11,8							
deltablue	1.172	1.118	1.215	1.181	1.134	1.164	6,624 17		deltablue	1.06	1.03	1.05		
go	1.002	1.045	1.083	1.004	1.032	1.033	5,184	129,192	go	1.05	1.06	0.98		
									mean	1.10	1.04	1.02		

