

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

Workload Type	Algorithm	Number of cores	Number of processes	Total Time	CPU Utilization	Throughput	Average Turn Around Time	Average Wait Time	Average Response Time Time
balanced	fcfs	1	10	277	98%	0.04	173.80	127.40	27.40
balanced	fcfs	1	100	3052	100%	0.03	2017.01	1967.17	285.88
balanced	fcfs	1	500	15014	100%	0.03	9696.16	9646.00	1312.24
balanced	fcfs	1	1000	30657	100%	0.03	20242.86	20191.49	2772.93
balanced	fcfs	2	10	132	88%	0.08	75.00	20.20	11.00
balanced	fcfs	2	100	1796	94%	0.06	1237.36	763.34	133.65
balanced	fcfs	2	500	8573	94%	0.06	5555.50	3589.08	702.96
balanced	fcfs	2	1000	16549	95%	0.06	10753.05	6963.88	1377.85
balanced	fcfs	4	10	183	86%	0.05	116.10	3.40	3.10
balanced	fcfs	4	100	1701	86%	0.06	1109.74	108.09	67.74
balanced	fcfs	4	500	8298	88%	0.06	5488.16	618.41	357.88
balanced	fcfs	4	1000	16465	87%	0.06	10689.93	1143.38	673.26
balanced	fcfs	8	10	174	89%	0.06	135.60	0.60	0.60
balanced	fcfs	8	100	1725	86%	0.06	1148.10	37.14	30.66
balanced	fcfs	8	500	8183	86%	0.06	5394.81	217.12	170.10
balanced	fcfs	8	1000	15613	86%	0.06	10044.24	437.36	342.45
balanced	fcfs	16	10	227	90%	0.04	165.70	0.00	0.00
balanced	fcfs	16	100	1522	87%	0.07	936.28	16.16	15.03
balanced	fcfs	16	500	8529	85%	0.06	5683.00	90.04	81.05
balanced	fcfs	16	1000	16580	86%	0.06	10901.57	188.13	167.27
balanced	fcfs	24	10	141	86%	0.07	86.20	0.00	0.00
balanced	fcfs	24	100	1518	85%	0.07	910.78	7.01	6.55
balanced	fcfs	24	500	8434	87%	0.06	5565.47	58.03	54.30
balanced	fcfs	24	1000	16337	86%	0.06	10485.58	122.58	114.00
balanced	fcfs	32	10	210	87%	0.05	144.50	0.00	0.00
balanced	fcfs	32	100	1603	85%	0.06	1035.80	5.61	5.14
balanced	fcfs	32	500	8254	84%	0.06	5434.26	40.49	38.20
balanced	fcfs	32	1000	16092	86%	0.06	10421.49	84.35	79.42
balanced	fcfs	48	10	175	85%	0.06	114.40	0.00	0.00
balanced	fcfs	48	100	1605	85%	0.06	1082.31	2.64	2.60
balanced	fcfs	48	500	8180	85%	0.06	5327.70	25.17	24.51
balanced	fcfs	48	1000	16878	86%	0.06	11242.70	55.91	53.99
balanced	roundrobin	1	10	289	97%	0.03	215.40	167.80	12.10
balanced	roundrobin	1	100	2946	100%	0.03	1977.92	1919.61	138.18
balanced	roundrobin	1	500	15147	100%	0.03	10010.72	9954.40	664.36
balanced	roundrobin	1	1000	29687	100%	0.03	19443.15	19387.28	1354.49
balanced	roundrobin	2	10	225	93%	0.04	152.90	41.30	4.90
balanced	roundrobin	2	100	1731	92%	0.06	1175.76	469.49	66.04
balanced	roundrobin	2	500	8971	93%	0.06	6089.28	3391.99	334.92
balanced	roundrobin	2	1000	17328	94%	0.06	11389.60	6758.15	672.36
balanced	roundrobin	4	10	141	97%	0.07	82.20	2.60	2.00
balanced	roundrobin	4	100	1783	85%	0.06	1226.36	116.58	31.88
balanced	roundrobin	4	500	8322	87%	0.06	5472.09	769.35	167.38
balanced	roundrobin	4	1000	16382	87%	0.06	10452.02	1487.88	335.75
balanced	roundrobin	8	10	180	79%	0.06	106.50	0.30	0.30
balanced	roundrobin	8	100	1672	89%	0.06	1159.29	46.83	14.99
balanced	roundrobin	8	500	8428	85%	0.06	5566.53	274.62	82.06
balanced	roundrobin	8	1000	16972	86%	0.06	11125.09	546.30	168.14
balanced	roundrobin	16	10	203	85%	0.05	150.90	0.00	0.00
balanced	roundrobin	16	100	1554	86%	0.06	1014.92	18.92	6.95
balanced	roundrobin	16	500	8467	85%	0.06	5610.48	107.79	40.64
balanced	roundrobin	16	1000	16175	85%	0.06	10340.74	245.03	83.90

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

balanced	roundrobin	24	10	189	92%	0.05	123.70	0.00	0.00
balanced	roundrobin	24	100	1600	85%	0.06	979.87	10.76	4.29
balanced	roundrobin	24	500	8324	86%	0.06	5538.23	71.42	26.70
balanced	roundrobin	24	1000	16027	84%	0.06	10209.85	166.04	55.78
balanced	roundrobin	32	10	198	85%	0.05	142.20	0.00	0.00
balanced	roundrobin	32	100	1713	88%	0.06	1138.35	5.82	2.89
balanced	roundrobin	32	500	8449	85%	0.06	5530.80	55.49	19.93
balanced	roundrobin	32	1000	16126	85%	0.06	10314.66	111.11	41.44
balanced	roundrobin	48	10	173	87%	0.06	113.80	0.00	0.00
balanced	roundrobin	48	100	1885	86%	0.05	1308.93	3.40	1.46
balanced	roundrobin	48	500	8485	86%	0.06	5583.90	34.73	12.86
balanced	roundrobin	48	1000	16382	85%	0.06	10683.17	71.28	26.89
balanced	spf	1	10	260	97%	0.04	147.00	103.60	39.20
balanced	spf	1	100	3135	100%	0.03	1768.00	1705.19	482.88
balanced	spf	1	500	15389	100%	0.03	7965.15	7828.71	2557.24
balanced	spf	1	1000	30109	100%	0.03	16030.20	15791.13	5191.99
balanced	spf	2	10	174	93%	0.06	98.00	26.40	15.90
balanced	spf	2	100	1707	96%	0.06	1121.06	495.33	208.25
balanced	spf	2	500	8800	95%	0.06	5669.78	2166.90	942.35
balanced	spf	2	1000	16708	95%	0.06	10477.10	4215.40	1973.24
balanced	spf	4	10	177	91%	0.06	117.60	3.80	2.50
balanced	spf	4	100	1487	89%	0.07	914.64	76.68	67.35
balanced	spf	4	500	8433	87%	0.06	5524.63	383.53	302.22
balanced	spf	4	1000	16521	88%	0.06	10810.03	760.87	617.76
balanced	spf	8	10	122	83%	0.08	56.50	0.50	0.50
balanced	spf	8	100	1713	86%	0.06	1095.15	30.05	27.36
balanced	spf	8	500	8417	87%	0.06	5547.64	140.56	128.20
balanced	spf	8	1000	16733	86%	0.06	10923.23	294.83	268.06
balanced	spf	16	10	171	89%	0.06	128.30	0.00	0.00
balanced	spf	16	100	1708	85%	0.06	1134.57	8.71	8.58
balanced	spf	16	500	7772	86%	0.06	4946.01	64.40	61.21
balanced	spf	16	1000	16303	86%	0.06	10682.87	129.11	124.66
balanced	spf	24	10	159	89%	0.06	95.50	0.00	0.00
balanced	spf	24	100	1639	83%	0.06	1031.87	6.16	6.10
balanced	spf	24	500	8120	86%	0.06	5257.76	39.77	38.63
balanced	spf	24	1000	16910	86%	0.06	11157.77	80.53	78.50
balanced	spf	32	10	144	79%	0.07	78.90	0.00	0.00
balanced	spf	32	100	1652	86%	0.06	1095.47	3.53	3.43
balanced	spf	32	500	8129	86%	0.06	5245.80	28.42	27.76
balanced	spf	32	1000	16728	86%	0.06	10868.97	61.48	60.45
balanced	spf	48	10	175	84%	0.06	99.90	0.00	0.00
balanced	spf	48	100	1492	88%	0.07	944.12	1.57	1.57
balanced	spf	48	500	8176	86%	0.06	5338.97	17.56	17.37
balanced	spf	48	1000	16711	84%	0.06	10828.63	37.38	36.99
balanced	srtf	1	10	253	97%	0.04	149.30	102.70	47.80
balanced	srtf	1	100	2959	100%	0.03	1596.50	1536.97	514.79
balanced	srtf	1	500	15470	100%	0.03	8169.65	8054.11	2864.22
balanced	srtf	1	1000	29719	100%	0.03	15457.27	15210.60	4987.67
balanced	srtf	2	10	205	94%	0.05	145.80	32.20	8.80
balanced	srtf	2	100	1808	94%	0.06	1205.77	352.54	175.75
balanced	srtf	2	500	8264	96%	0.06	5185.95	2201.28	976.88
balanced	srtf	2	1000	16277	96%	0.06	10123.60	4161.59	1878.53
balanced	srtf	4	10	186	79%	0.05	130.30	3.30	2.50
balanced	srtf	4	100	1635	88%	0.06	1123.18	73.80	62.43
balanced	srtf	4	500	8321	87%	0.06	5410.59	375.48	305.79

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

balanced	srtf	4	1000	16543	87%	0.06	10766.86	817.73	666.19
balanced	srtf	8	10	122	89%	0.08	67.90	0.20	0.20
balanced	srtf	8	100	1521	87%	0.07	957.41	29.69	26.61
balanced	srtf	8	500	8519	86%	0.06	5595.90	139.81	129.38
balanced	srtf	8	1000	16749	85%	0.06	10928.99	304.60	278.41
balanced	srtf	16	10	155	81%	0.06	77.80	0.00	0.00
balanced	srtf	16	100	1512	88%	0.07	954.79	10.78	10.57
balanced	srtf	16	500	8464	85%	0.06	5689.28	64.72	62.57
balanced	srtf	16	1000	16940	86%	0.06	11176.18	133.82	128.38
balanced	srtf	24	10	152	81%	0.07	92.60	0.00	0.00
balanced	srtf	24	100	1527	86%	0.07	990.48	5.72	5.58
balanced	srtf	24	500	8252	86%	0.06	5430.66	39.86	39.07
balanced	srtf	24	1000	16615	86%	0.06	10731.43	82.41	80.06
balanced	srtf	32	10	158	83%	0.06	110.20	0.00	0.00
balanced	srtf	32	100	1808	84%	0.06	1187.60	3.62	3.55
balanced	srtf	32	500	8647	85%	0.06	5704.81	27.82	27.31
balanced	srtf	32	1000	16184	86%	0.06	10456.29	60.04	59.20
balanced	srtf	48	10	176	85%	0.06	116.60	0.00	0.00
balanced	srtf	48	100	1772	85%	0.06	1208.74	1.90	1.88
balanced	srtf	48	500	8294	85%	0.06	5454.40	17.95	17.70
balanced	srtf	48	1000	16655	86%	0.06	10750.20	40.07	39.67
lecture	fcfs	1	4	35	100%	0.11	28.25	16.50	4.50
lecture	fcfs	2	4	21	100%	0.19	15.25	2.00	0.25
lecture	fcfs	4	4	20	100%	0.20	12.75	0.00	0.00
lecture	roundrobin	1	4	35	100%	0.11	24.50	12.75	2.25
lecture	roundrobin	2	4	23	100%	0.17	13.25	1.00	0.00
lecture	roundrobin	4	4	20	100%	0.20	12.75	0.00	0.00
lecture	spf	1	4	35	100%	0.11	23.50	11.25	3.00
lecture	spf	2	4	21	100%	0.19	13.75	1.25	0.25
lecture	spf	4	4	20	100%	0.20	12.75	0.00	0.00
lecture	srtf	1	4	35	100%	0.11	18.75	6.25	1.25
lecture	srtf	2	4	22	100%	0.18	14.00	1.25	0.00
lecture	srtf	4	4	20	100%	0.20	12.75	0.00	0.00
cpu_only	fcfs	1	10	523	100%	0.02	301.80	249.50	249.50
cpu_only	fcfs	1	100	6761	100%	0.01	3431.83	3364.22	3364.22
cpu_only	fcfs	1	500	30103	100%	0.02	14802.61	14742.40	14742.40
cpu_only	fcfs	1	1000	61790	100%	0.02	30952.70	30890.91	30890.91
cpu_only	fcfs	2	10	307	100%	0.03	184.40	128.80	128.80
cpu_only	fcfs	2	100	3095	100%	0.03	1595.17	1534.33	1534.33
cpu_only	fcfs	2	500	15633	100%	0.03	7776.57	7714.06	7714.06
cpu_only	fcfs	2	1000	31018	100%	0.03	15600.27	15538.26	15538.26
cpu_only	fcfs	4	10	211	100%	0.05	116.00	45.20	45.20
cpu_only	fcfs	4	100	1485	100%	0.07	733.68	676.43	676.43
cpu_only	fcfs	4	500	8110	100%	0.06	4142.80	4078.04	4078.04
cpu_only	fcfs	4	1000	15474	100%	0.06	7688.42	7626.77	7626.77
cpu_only	fcfs	8	10	115	100%	0.09	68.60	2.00	2.00
cpu_only	fcfs	8	100	815	100%	0.12	432.49	369.75	369.75
cpu_only	fcfs	8	500	4120	100%	0.12	2047.73	1982.82	1982.82
cpu_only	fcfs	8	1000	7847	100%	0.13	3986.95	3924.54	3924.54
cpu_only	fcfs	16	10	103	100%	0.10	60.50	0.00	0.00
cpu_only	fcfs	16	100	458	100%	0.22	226.33	161.58	161.58
cpu_only	fcfs	16	500	1995	100%	0.25	993.44	931.89	931.89
cpu_only	fcfs	16	1000	4038	100%	0.25	2005.82	1941.92	1941.92
cpu_only	fcfs	24	10	127	100%	0.08	69.70	0.00	0.00
cpu_only	fcfs	24	100	326	100%	0.31	157.51	93.83	93.83

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

cpu_only	fcfs	24	500	1337	100%	0.37	652.18	590.95	590.95
cpu_only	fcfs	24	1000	2653	100%	0.38	1331.92	1269.34	1269.34
cpu_only	fcfs	32	10	88	100%	0.11	53.50	0.00	0.00
cpu_only	fcfs	32	100	252	100%	0.40	121.31	58.48	58.48
cpu_only	fcfs	32	500	1087	100%	0.46	497.38	435.08	435.08
cpu_only	fcfs	32	1000	2051	100%	0.49	1020.80	957.30	957.30
cpu_only	fcfs	48	10	95	100%	0.11	53.20	0.00	0.00
cpu_only	fcfs	48	100	219	100%	0.46	93.53	28.95	28.95
cpu_only	fcfs	48	500	731	100%	0.68	359.58	296.34	296.34
cpu_only	fcfs	48	1000	1408	100%	0.71	667.93	605.05	605.05
cpu_only	roundrobin	1	10	659	100%	0.02	402.30	336.40	13.70
cpu_only	roundrobin	1	100	5603	100%	0.02	3406.06	3350.03	155.21
cpu_only	roundrobin	1	500	32049	100%	0.02	21132.59	21068.49	779.88
cpu_only	roundrobin	1	1000	60688	100%	0.02	39727.03	39666.34	1567.66
cpu_only	roundrobin	2	10	286	100%	0.04	175.70	122.50	6.40
cpu_only	roundrobin	2	100	2947	100%	0.03	1915.48	1856.66	76.33
cpu_only	roundrobin	2	500	14986	100%	0.03	10027.85	9967.92	390.01
cpu_only	roundrobin	2	1000	30834	100%	0.03	20633.42	20571.77	775.30
cpu_only	roundrobin	4	10	188	100%	0.05	130.40	58.60	2.40
cpu_only	roundrobin	4	100	1598	100%	0.06	1090.15	1026.74	36.81
cpu_only	roundrobin	4	500	7700	100%	0.06	5111.04	5049.56	193.36
cpu_only	roundrobin	4	1000	15501	100%	0.06	10324.52	10262.59	387.92
cpu_only	roundrobin	8	10	115	100%	0.09	57.00	1.30	0.40
cpu_only	roundrobin	8	100	814	100%	0.12	555.42	491.23	17.99
cpu_only	roundrobin	8	500	3926	100%	0.13	2616.67	2554.03	96.42
cpu_only	roundrobin	8	1000	7783	100%	0.13	5100.76	5038.66	194.57
cpu_only	roundrobin	16	10	128	100%	0.08	67.90	0.00	0.00
cpu_only	roundrobin	16	100	424	100%	0.24	285.71	220.02	8.40
cpu_only	roundrobin	16	500	1914	100%	0.26	1281.18	1220.39	47.14
cpu_only	roundrobin	16	1000	3942	100%	0.25	2595.35	2532.60	95.12
cpu_only	roundrobin	24	10	157	100%	0.06	52.20	0.00	0.00
cpu_only	roundrobin	24	100	286	100%	0.35	174.08	112.44	4.92
cpu_only	roundrobin	24	500	1272	100%	0.39	804.19	744.57	30.62
cpu_only	roundrobin	24	1000	2680	100%	0.37	1791.33	1727.78	63.66
cpu_only	roundrobin	32	10	135	100%	0.07	64.50	0.00	0.00
cpu_only	roundrobin	32	100	245	100%	0.41	135.76	73.39	3.34
cpu_only	roundrobin	32	500	1027	100%	0.49	668.97	605.08	22.67
cpu_only	roundrobin	32	1000	2020	100%	0.50	1337.14	1273.76	47.23
cpu_only	roundrobin	48	10	134	100%	0.07	80.60	0.00	0.00
cpu_only	roundrobin	48	100	180	100%	0.56	96.14	31.19	1.72
cpu_only	roundrobin	48	500	673	100%	0.74	409.08	349.19	14.80
cpu_only	roundrobin	48	1000	1308	100%	0.76	866.93	804.81	30.97
cpu_only	spf	1	10	522	100%	0.02	228.20	176.00	176.00
cpu_only	spf	1	100	6109	100%	0.02	2868.62	2807.53	2807.53
cpu_only	spf	1	500	31416	100%	0.02	15014.61	14951.78	14951.78
cpu_only	spf	1	1000	60927	100%	0.02	28843.62	28782.69	28782.69
cpu_only	spf	2	10	292	100%	0.03	150.00	94.00	94.00
cpu_only	spf	2	100	2976	100%	0.03	1249.24	1190.72	1190.72
cpu_only	spf	2	500	15514	100%	0.03	7146.07	7084.07	7084.07
cpu_only	spf	2	1000	31009	100%	0.03	14618.53	14556.51	14556.51
cpu_only	spf	4	10	151	100%	0.07	66.80	17.00	17.00
cpu_only	spf	4	100	1633	100%	0.06	742.23	679.77	679.77
cpu_only	spf	4	500	7339	100%	0.07	3431.26	3372.77	3372.77
cpu_only	spf	4	1000	15387	100%	0.07	7282.43	7221.02	7221.02
cpu_only	spf	8	10	135	100%	0.07	66.90	5.20	5.20

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

cpu_only	spf	8	100	842	100%	0.12	409.19	344.91	344.91
cpu_only	spf	8	500	4059	100%	0.12	1971.47	1907.35	1907.35
cpu_only	spf	8	1000	7934	100%	0.13	3765.17	3701.98	3701.98
cpu_only	spf	16	10	101	100%	0.10	56.70	0.00	0.00
cpu_only	spf	16	100	424	100%	0.24	201.14	140.50	140.50
cpu_only	spf	16	500	2001	100%	0.25	949.60	887.95	887.95
cpu_only	spf	16	1000	3817	100%	0.26	1790.54	1730.61	1730.61
cpu_only	spf	24	10	114	100%	0.09	67.50	0.00	0.00
cpu_only	spf	24	100	354	100%	0.28	148.44	87.20	87.20
cpu_only	spf	24	500	1324	100%	0.38	612.57	551.74	551.74
cpu_only	spf	24	1000	2573	100%	0.39	1187.60	1127.47	1127.47
cpu_only	spf	32	10	140	100%	0.07	66.70	0.00	0.00
cpu_only	spf	32	100	293	100%	0.34	120.21	53.77	53.77
cpu_only	spf	32	500	1073	100%	0.47	493.67	430.10	430.10
cpu_only	spf	32	1000	2024	100%	0.49	939.74	876.92	876.92
cpu_only	spf	48	10	119	100%	0.08	59.70	0.00	0.00
cpu_only	spf	48	100	220	100%	0.45	101.80	30.84	30.84
cpu_only	spf	48	500	724	100%	0.69	322.69	261.66	261.66
cpu_only	spf	48	1000	1350	100%	0.74	626.49	565.05	565.05
cpu_only	srtf	1	10	629	100%	0.02	362.70	299.80	143.70
cpu_only	srtf	1	100	6277	100%	0.02	3269.67	3206.90	1265.82
cpu_only	srtf	1	500	31976	100%	0.02	16731.65	16667.69	7221.50
cpu_only	srtf	1	1000	63259	100%	0.02	32976.21	32912.95	13615.28
cpu_only	srtf	2	10	314	100%	0.03	178.50	119.00	34.00
cpu_only	srtf	2	100	3324	100%	0.03	1804.29	1737.98	605.82
cpu_only	srtf	2	500	15164	100%	0.03	7716.79	7656.15	3402.14
cpu_only	srtf	2	1000	30078	100%	0.03	15488.48	15428.36	6542.16
cpu_only	srtf	4	10	255	100%	0.04	152.60	72.90	30.20
cpu_only	srtf	4	100	1504	100%	0.07	732.76	674.16	298.92
cpu_only	srtf	4	500	7954	100%	0.06	4181.96	4118.77	1807.71
cpu_only	srtf	4	1000	15792	100%	0.06	8253.12	8190.04	3298.18
cpu_only	srtf	8	10	138	100%	0.07	73.90	3.20	1.50
cpu_only	srtf	8	100	819	100%	0.12	406.63	347.11	155.73
cpu_only	srtf	8	500	3964	100%	0.13	2042.62	1979.77	798.38
cpu_only	srtf	8	1000	7991	100%	0.13	4064.77	4001.08	1622.09
cpu_only	srtf	16	10	120	100%	0.08	53.20	0.00	0.00
cpu_only	srtf	16	100	424	100%	0.24	215.32	154.05	74.17
cpu_only	srtf	16	500	2004	100%	0.25	1018.32	956.15	388.06
cpu_only	srtf	16	1000	3953	100%	0.25	2069.11	2006.74	820.94
cpu_only	srtf	24	10	77	100%	0.13	45.90	0.00	0.00
cpu_only	srtf	24	100	326	100%	0.31	150.16	90.36	44.38
cpu_only	srtf	24	500	1434	100%	0.35	711.68	646.43	275.77
cpu_only	srtf	24	1000	2713	100%	0.37	1354.33	1291.47	557.47
cpu_only	srtf	32	10	122	100%	0.08	45.90	0.00	0.00
cpu_only	srtf	32	100	285	100%	0.35	125.89	60.06	29.90
cpu_only	srtf	32	500	1014	100%	0.49	510.58	448.53	186.44
cpu_only	srtf	32	1000	1997	100%	0.50	1032.18	969.79	399.41
cpu_only	srtf	48	10	129	100%	0.08	74.10	0.00	0.00
cpu_only	srtf	48	100	202	100%	0.50	83.25	25.16	14.74
cpu_only	srtf	48	500	692	100%	0.72	352.02	290.65	128.44
cpu_only	srtf	48	1000	1362	100%	0.73	674.11	612.29	265.88
cpu_heavy	fcfs	1	10	214	99%	0.05	108.60	83.40	27.50
cpu_heavy	fcfs	1	100	2842	100%	0.04	1813.77	1780.18	267.75
cpu_heavy	fcfs	1	500	14847	100%	0.03	9506.59	9471.47	1369.95
cpu_heavy	fcfs	1	1000	30918	100%	0.03	20343.50	20306.98	2706.24

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

cpu_heavy	fcfs	2	10	137	99%	0.07	67.40	35.80	11.90
cpu_heavy	fcfs	2	100	1510	100%	0.07	1005.40	969.18	133.73
cpu_heavy	fcfs	2	500	7670	100%	0.07	5045.99	5009.09	699.10
cpu_heavy	fcfs	2	1000	14880	100%	0.07	9704.31	9668.52	1341.49
cpu_heavy	fcfs	4	10	76	99%	0.13	52.40	18.80	2.20
cpu_heavy	fcfs	4	100	758	100%	0.13	485.82	446.34	63.48
cpu_heavy	fcfs	4	500	3805	100%	0.13	2491.18	2452.10	347.07
cpu_heavy	fcfs	4	1000	7794	100%	0.13	5089.20	5049.05	686.27
cpu_heavy	fcfs	8	10	84	96%	0.12	48.60	0.40	0.30
cpu_heavy	fcfs	8	100	565	100%	0.18	385.19	81.36	28.88
cpu_heavy	fcfs	8	500	2773	98%	0.18	1769.11	414.09	166.71
cpu_heavy	fcfs	8	1000	5413	98%	0.18	3478.50	868.14	339.16
cpu_heavy	fcfs	16	10	77	97%	0.13	40.40	0.00	0.00
cpu_heavy	fcfs	16	100	575	99%	0.17	381.23	18.27	12.99
cpu_heavy	fcfs	16	500	2770	99%	0.18	1838.74	124.82	85.48
cpu_heavy	fcfs	16	1000	5441	98%	0.18	3507.95	246.74	170.77
cpu_heavy	fcfs	24	10	68	96%	0.15	39.40	0.00	0.00
cpu_heavy	fcfs	24	100	571	99%	0.18	374.74	10.15	8.42
cpu_heavy	fcfs	24	500	2712	98%	0.18	1790.61	70.76	55.69
cpu_heavy	fcfs	24	1000	5406	98%	0.19	3510.14	140.52	110.74
cpu_heavy	fcfs	32	10	60	95%	0.17	35.40	0.00	0.00
cpu_heavy	fcfs	32	100	584	99%	0.17	398.51	6.07	5.15
cpu_heavy	fcfs	32	500	2759	98%	0.18	1798.62	46.74	39.62
cpu_heavy	fcfs	32	1000	5486	98%	0.18	3570.74	96.25	82.03
cpu_heavy	fcfs	48	10	66	97%	0.15	43.60	0.00	0.00
cpu_heavy	fcfs	48	100	614	100%	0.16	418.42	2.65	2.47
cpu_heavy	fcfs	48	500	2777	98%	0.18	1795.12	27.93	25.02
cpu_heavy	fcfs	48	1000	5512	98%	0.18	3546.14	62.54	56.36
cpu_heavy	roundrobin	1	10	300	100%	0.03	213.40	177.70	12.50
cpu_heavy	roundrobin	1	100	2994	100%	0.03	1949.80	1914.54	134.69
cpu_heavy	roundrobin	1	500	15003	100%	0.03	9808.29	9772.91	683.65
cpu_heavy	roundrobin	1	1000	30198	100%	0.03	19862.39	19826.72	1364.48
cpu_heavy	roundrobin	2	10	171	99%	0.06	127.00	87.00	5.50
cpu_heavy	roundrobin	2	100	1563	100%	0.06	1025.12	987.50	64.80
cpu_heavy	roundrobin	2	500	7853	100%	0.06	5357.43	5319.43	333.47
cpu_heavy	roundrobin	2	1000	15235	100%	0.07	10202.24	10165.28	669.13
cpu_heavy	roundrobin	4	10	77	97%	0.13	43.40	11.10	2.20
cpu_heavy	roundrobin	4	100	753	100%	0.13	493.88	453.05	32.93
cpu_heavy	roundrobin	4	500	3811	100%	0.13	2549.21	2507.83	168.06
cpu_heavy	roundrobin	4	1000	7676	100%	0.13	5143.04	5099.57	336.75
cpu_heavy	roundrobin	8	10	76	97%	0.13	45.50	0.30	0.20
cpu_heavy	roundrobin	8	100	586	100%	0.17	392.18	99.93	15.14
cpu_heavy	roundrobin	8	500	2814	99%	0.18	1826.88	531.78	82.65
cpu_heavy	roundrobin	8	1000	5664	98%	0.18	3731.41	1081.65	168.22
cpu_heavy	roundrobin	16	10	69	97%	0.14	43.20	0.00	0.00
cpu_heavy	roundrobin	16	100	542	100%	0.18	353.50	24.88	7.08
cpu_heavy	roundrobin	16	500	2813	98%	0.18	1852.67	147.86	41.11
cpu_heavy	roundrobin	16	1000	5461	98%	0.18	3537.28	300.50	83.60
cpu_heavy	roundrobin	24	10	74	99%	0.14	49.60	0.00	0.00
cpu_heavy	roundrobin	24	100	566	99%	0.18	377.15	12.04	4.22
cpu_heavy	roundrobin	24	500	2903	99%	0.17	1967.65	94.35	27.01
cpu_heavy	roundrobin	24	1000	5372	99%	0.19	3407.72	179.93	54.65
cpu_heavy	roundrobin	32	10	81	96%	0.12	46.90	0.00	0.00
cpu_heavy	roundrobin	32	100	508	98%	0.20	311.36	6.75	2.86
cpu_heavy	roundrobin	32	500	2775	98%	0.18	1787.89	58.83	19.57

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

cpu_heavy	roundrobin	32	1000	5466	98%	0.18	3520.70	129.06	41.28
cpu_heavy	roundrobin	48	10	65	99%	0.15	33.70	0.00	0.00
cpu_heavy	roundrobin	48	100	475	99%	0.21	292.67	2.63	1.47
cpu_heavy	roundrobin	48	500	2789	98%	0.18	1837.94	36.37	12.69
cpu_heavy	roundrobin	48	1000	5581	98%	0.18	3666.66	79.94	27.02
cpu_heavy	spf	1	10	338	100%	0.03	236.60	196.40	44.00
cpu_heavy	spf	1	100	3320	100%	0.03	1912.75	1873.69	631.60
cpu_heavy	spf	1	500	14498	100%	0.03	7483.43	7449.11	2469.83
cpu_heavy	spf	1	1000	30745	100%	0.03	16258.05	16221.78	5420.56
cpu_heavy	spf	2	10	229	99%	0.04	148.80	95.40	24.80
cpu_heavy	spf	2	100	1626	100%	0.06	898.48	858.57	247.28
cpu_heavy	spf	2	500	7204	100%	0.07	3815.50	3773.42	1260.42
cpu_heavy	spf	2	1000	14685	100%	0.07	7741.07	7689.71	2602.55
cpu_heavy	spf	4	10	104	96%	0.10	57.00	17.70	5.70
cpu_heavy	spf	4	100	748	99%	0.13	376.28	314.19	96.38
cpu_heavy	spf	4	500	3665	100%	0.14	1955.46	1823.21	639.46
cpu_heavy	spf	4	1000	7612	100%	0.13	4090.40	3848.44	1298.51
cpu_heavy	spf	8	10	75	99%	0.13	51.70	0.40	0.40
cpu_heavy	spf	8	100	579	100%	0.17	380.84	58.55	38.27
cpu_heavy	spf	8	500	2796	100%	0.18	1797.56	314.34	208.86
cpu_heavy	spf	8	1000	5382	99%	0.19	3447.66	582.98	395.58
cpu_heavy	spf	16	10	73	97%	0.14	36.10	0.00	0.00
cpu_heavy	spf	16	100	553	99%	0.18	352.52	9.97	9.02
cpu_heavy	spf	16	500	2757	99%	0.18	1782.23	78.36	68.75
cpu_heavy	spf	16	1000	5593	98%	0.18	3664.08	171.15	144.89
cpu_heavy	spf	24	10	77	95%	0.13	41.00	0.00	0.00
cpu_heavy	spf	24	100	502	99%	0.20	300.83	6.50	5.95
cpu_heavy	spf	24	500	2906	99%	0.17	1931.96	48.27	44.73
cpu_heavy	spf	24	1000	5381	99%	0.19	3469.00	99.88	90.51
cpu_heavy	spf	32	10	51	98%	0.20	26.00	0.00	0.00
cpu_heavy	spf	32	100	572	99%	0.17	376.51	3.73	3.65
cpu_heavy	spf	32	500	2695	99%	0.19	1718.28	33.12	31.53
cpu_heavy	spf	32	1000	5523	98%	0.18	3560.05	65.60	61.95
cpu_heavy	spf	48	10	80	99%	0.13	44.20	0.00	0.00
cpu_heavy	spf	48	100	565	100%	0.18	362.44	1.82	1.82
cpu_heavy	spf	48	500	2741	99%	0.18	1777.01	18.44	17.90
cpu_heavy	spf	48	1000	5446	98%	0.18	3509.68	41.99	40.46
cpu_heavy	srtf	1	10	285	98%	0.04	154.70	122.00	68.70
cpu_heavy	srtf	1	100	3038	100%	0.03	1600.97	1565.28	461.48
cpu_heavy	srtf	1	500	14916	100%	0.03	7777.77	7742.57	2666.84
cpu_heavy	srtf	1	1000	29806	100%	0.03	15455.52	15420.31	5148.88
cpu_heavy	srtf	2	10	179	96%	0.06	81.40	45.20	24.00
cpu_heavy	srtf	2	100	1565	100%	0.06	861.59	823.84	269.45
cpu_heavy	srtf	2	500	7826	100%	0.06	4201.14	4156.34	1303.41
cpu_heavy	srtf	2	1000	15347	100%	0.07	8325.74	8275.11	2460.27
cpu_heavy	srtf	4	10	107	98%	0.09	63.50	21.60	8.80
cpu_heavy	srtf	4	100	812	100%	0.12	428.47	377.01	131.04
cpu_heavy	srtf	4	500	3838	100%	0.13	2110.63	1954.32	627.99
cpu_heavy	srtf	4	1000	7574	100%	0.13	4062.14	3784.29	1258.96
cpu_heavy	srtf	8	10	86	97%	0.12	43.60	0.20	0.20
cpu_heavy	srtf	8	100	578	100%	0.17	371.85	43.42	28.66
cpu_heavy	srtf	8	500	2659	99%	0.19	1690.09	301.29	175.66
cpu_heavy	srtf	8	1000	5660	99%	0.18	3680.07	558.28	369.80
cpu_heavy	srtf	16	10	67	97%	0.15	30.00	0.00	0.00
cpu_heavy	srtf	16	100	565	98%	0.18	373.93	11.23	10.17

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

cpu_heavy	srtf	16	500	2703	99%	0.19	1728.18	79.12	68.59
cpu_heavy	srtf	16	1000	5484	99%	0.18	3541.66	166.26	146.03
cpu_heavy	srtf	24	10	82	98%	0.12	53.80	0.00	0.00
cpu_heavy	srtf	24	100	528	99%	0.19	341.25	6.62	6.01
cpu_heavy	srtf	24	500	2783	99%	0.18	1836.40	48.07	44.41
cpu_heavy	srtf	24	1000	5351	98%	0.19	3411.25	95.24	88.01
cpu_heavy	srtf	32	10	69	99%	0.14	51.80	0.00	0.00
cpu_heavy	srtf	32	100	536	98%	0.19	352.69	3.42	3.22
cpu_heavy	srtf	32	500	2750	98%	0.18	1770.11	32.18	30.28
cpu_heavy	srtf	32	1000	5510	99%	0.18	3630.77	67.96	64.28
cpu_heavy	srtf	48	10	79	98%	0.13	48.30	0.00	0.00
cpu_heavy	srtf	48	100	554	99%	0.18	355.69	1.62	1.62
cpu_heavy	srtf	48	500	2845	98%	0.18	1867.27	19.27	18.53
cpu_heavy	srtf	48	1000	5711	98%	0.18	3771.43	41.33	39.86
io_heavy	fcfs	1	10	352	18%	0.03	262.00	5.90	4.50
io_heavy	fcfs	1	100	3275	19%	0.03	2248.93	58.33	49.50
io_heavy	fcfs	1	500	14858	18%	0.03	9715.25	295.90	249.50
io_heavy	fcfs	1	1000	29618	19%	0.03	19049.41	598.42	499.50
io_heavy	fcfs	2	10	296	18%	0.03	218.50	2.00	2.00
io_heavy	fcfs	2	100	3073	16%	0.03	1982.04	25.96	24.50
io_heavy	fcfs	2	500	14410	16%	0.03	9205.81	135.59	124.50
io_heavy	fcfs	2	1000	29985	17%	0.03	19692.73	271.65	249.50
io_heavy	fcfs	4	10	314	17%	0.03	214.40	0.80	0.80
io_heavy	fcfs	4	100	3150	16%	0.03	2023.64	12.53	12.00
io_heavy	fcfs	4	500	14924	16%	0.03	9684.45	64.46	62.00
io_heavy	fcfs	4	1000	30586	16%	0.03	20087.28	128.74	124.50
io_heavy	fcfs	8	10	328	15%	0.03	235.70	0.20	0.20
io_heavy	fcfs	8	100	2940	15%	0.03	1820.05	5.90	5.76
io_heavy	fcfs	8	500	15487	15%	0.03	9976.35	31.19	30.75
io_heavy	fcfs	8	1000	31408	15%	0.03	20772.97	63.38	62.00
io_heavy	fcfs	16	10	313	15%	0.03	200.70	0.00	0.00
io_heavy	fcfs	16	100	3069	15%	0.03	2004.43	2.64	2.64
io_heavy	fcfs	16	500	15520	15%	0.03	10272.44	15.23	15.13
io_heavy	fcfs	16	1000	31158	15%	0.03	20700.19	31.04	30.75
io_heavy	fcfs	24	10	275	16%	0.04	180.00	0.00	0.00
io_heavy	fcfs	24	100	2925	15%	0.03	1966.67	1.60	1.60
io_heavy	fcfs	24	500	15282	15%	0.03	9847.46	9.94	9.92
io_heavy	fcfs	24	1000	30473	15%	0.03	19795.47	20.47	20.34
io_heavy	fcfs	32	10	255	17%	0.04	174.20	0.00	0.00
io_heavy	fcfs	32	100	3240	15%	0.03	2196.17	1.08	1.08
io_heavy	fcfs	32	500	15142	15%	0.03	9909.63	7.34	7.32
io_heavy	fcfs	32	1000	29949	15%	0.03	19218.19	15.14	15.13
io_heavy	fcfs	48	10	189	18%	0.05	103.60	0.00	0.00
io_heavy	fcfs	48	100	3115	15%	0.03	2056.33	0.56	0.56
io_heavy	fcfs	48	500	14742	15%	0.03	9719.53	4.73	4.72
io_heavy	fcfs	48	1000	30691	15%	0.03	19780.34	9.94	9.92
io_heavy	roundrobin	1	10	345	18%	0.03	229.90	4.50	4.50
io_heavy	roundrobin	1	100	2952	18%	0.03	1890.57	60.72	49.50
io_heavy	roundrobin	1	500	15673	18%	0.03	10477.70	301.43	249.50
io_heavy	roundrobin	1	1000	30548	18%	0.03	20010.38	598.74	499.50
io_heavy	roundrobin	2	10	311	16%	0.03	188.20	2.30	2.00
io_heavy	roundrobin	2	100	3074	17%	0.03	1984.34	27.11	24.50
io_heavy	roundrobin	2	500	15277	17%	0.03	9989.21	134.38	124.50
io_heavy	roundrobin	2	1000	30595	16%	0.03	19887.64	268.36	249.50
io_heavy	roundrobin	4	10	366	14%	0.03	287.60	0.80	0.80



All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

io_heavy	roundrobin	4	100	2854	16%	0.04	1881.62	12.20	12.00
io_heavy	roundrobin	4	500	15666	16%	0.03	10443.93	64.33	62.00
io_heavy	roundrobin	4	1000	29673	16%	0.03	19437.75	129.79	124.50
io_heavy	roundrobin	8	10	353	16%	0.03	247.50	0.20	0.20
io_heavy	roundrobin	8	100	2901	15%	0.03	1744.01	5.79	5.76
io_heavy	roundrobin	8	500	14862	15%	0.03	9594.00	31.43	30.75
io_heavy	roundrobin	8	1000	29919	15%	0.03	19580.58	63.02	62.00
io_heavy	roundrobin	16	10	384	14%	0.03	276.80	0.00	0.00
io_heavy	roundrobin	16	100	2691	14%	0.04	1677.40	2.67	2.64
io_heavy	roundrobin	16	500	14915	15%	0.03	9749.74	15.28	15.13
io_heavy	roundrobin	16	1000	31215	15%	0.03	20416.95	31.02	30.75
io_heavy	roundrobin	24	10	265	13%	0.04	157.30	0.00	0.00
io_heavy	roundrobin	24	100	2817	16%	0.04	1852.12	1.60	1.60
io_heavy	roundrobin	24	500	15226	15%	0.03	10079.05	9.94	9.92
io_heavy	roundrobin	24	1000	29999	15%	0.03	19286.20	20.46	20.34
io_heavy	roundrobin	32	10	377	14%	0.03	264.10	0.00	0.00
io_heavy	roundrobin	32	100	2959	15%	0.03	1850.60	1.08	1.08
io_heavy	roundrobin	32	500	15081	15%	0.03	9771.82	7.35	7.32
io_heavy	roundrobin	32	1000	30564	15%	0.03	20079.82	15.22	15.13
io_heavy	roundrobin	48	10	303	16%	0.03	210.30	0.00	0.00
io_heavy	roundrobin	48	100	2978	15%	0.03	1963.92	0.56	0.56
io_heavy	roundrobin	48	500	15000	15%	0.03	9650.99	4.72	4.72
io_heavy	roundrobin	48	1000	30160	15%	0.03	19474.67	9.93	9.92
io_heavy	spf	1	10	177	23%	0.06	80.00	4.90	4.50
io_heavy	spf	1	100	2914	19%	0.03	1909.89	59.90	49.50
io_heavy	spf	1	500	14727	18%	0.03	9342.20	299.76	249.50
io_heavy	spf	1	1000	30487	18%	0.03	19894.88	598.70	499.50
io_heavy	spf	2	10	202	19%	0.05	128.30	2.00	2.00
io_heavy	spf	2	100	2933	16%	0.03	1871.82	25.68	24.50
io_heavy	spf	2	500	15026	16%	0.03	9800.40	136.62	124.50
io_heavy	spf	2	1000	30361	16%	0.03	19486.80	271.94	249.50
io_heavy	spf	4	10	337	15%	0.03	210.80	0.80	0.80
io_heavy	spf	4	100	2834	15%	0.04	1771.26	12.54	12.00
io_heavy	spf	4	500	14887	16%	0.03	9750.74	64.32	62.00
io_heavy	spf	4	1000	30176	16%	0.03	19515.15	129.32	124.50
io_heavy	spf	8	10	319	15%	0.03	200.40	0.20	0.20
io_heavy	spf	8	100	2910	15%	0.03	1885.64	5.81	5.76
io_heavy	spf	8	500	14182	15%	0.04	8959.88	31.27	30.75
io_heavy	spf	8	1000	29387	15%	0.03	19106.18	63.14	62.00
io_heavy	spf	16	10	314	13%	0.03	216.40	0.00	0.00
io_heavy	spf	16	100	3031	15%	0.03	1832.72	2.64	2.64
io_heavy	spf	16	500	14909	16%	0.03	9859.50	15.23	15.13
io_heavy	spf	16	1000	30629	15%	0.03	20244.29	31.12	30.75
io_heavy	spf	24	10	323	15%	0.03	221.80	0.00	0.00
io_heavy	spf	24	100	3243	15%	0.03	2158.00	1.61	1.60
io_heavy	spf	24	500	15214	15%	0.03	9964.53	10.00	9.92
io_heavy	spf	24	1000	29767	15%	0.03	19352.49	20.42	20.34
io_heavy	spf	32	10	328	15%	0.03	207.70	0.00	0.00
io_heavy	spf	32	100	2889	15%	0.03	1819.88	1.09	1.08
io_heavy	spf	32	500	15039	15%	0.03	9658.28	7.33	7.32
io_heavy	spf	32	1000	29527	15%	0.03	19222.69	15.17	15.13
io_heavy	spf	48	10	251	17%	0.04	179.60	0.00	0.00
io_heavy	spf	48	100	3158	15%	0.03	2115.37	0.56	0.56
io_heavy	spf	48	500	15380	15%	0.03	10193.47	4.73	4.72
io_heavy	spf	48	1000	29994	15%	0.03	19395.63	9.97	9.92

All Algorithm Simulation Data  
with various workloads and a range of processes from 10 to 1000, lecture example has 4 processes

io_heavy	srtf	1	10	268	16%	0.04	154.00	4.50	4.50
io_heavy	srtf	1	100	3039	18%	0.03	2028.52	55.34	49.50
io_heavy	srtf	1	500	15295	18%	0.03	9935.89	288.01	249.50
io_heavy	srtf	1	1000	29542	18%	0.03	18842.47	590.04	499.50
io_heavy	srtf	2	10	262	16%	0.04	153.00	2.10	2.00
io_heavy	srtf	2	100	3079	17%	0.03	2107.57	26.27	24.50
io_heavy	srtf	2	500	15132	17%	0.03	9897.53	135.41	124.50
io_heavy	srtf	2	1000	30045	16%	0.03	19602.08	272.22	249.50
io_heavy	srtf	4	10	317	17%	0.03	259.10	0.80	0.80
io_heavy	srtf	4	100	3066	16%	0.03	1974.86	12.63	12.00
io_heavy	srtf	4	500	15209	15%	0.03	9825.98	65.08	62.00
io_heavy	srtf	4	1000	29850	15%	0.03	19336.04	129.32	124.50
io_heavy	srtf	8	10	374	15%	0.03	267.60	0.20	0.20
io_heavy	srtf	8	100	2951	15%	0.03	1936.96	5.82	5.76
io_heavy	srtf	8	500	15694	16%	0.03	10557.70	31.40	30.75
io_heavy	srtf	8	1000	29514	15%	0.03	18868.35	63.09	62.00
io_heavy	srtf	16	10	270	14%	0.04	173.40	0.00	0.00
io_heavy	srtf	16	100	3144	15%	0.03	2081.55	2.73	2.64
io_heavy	srtf	16	500	15082	15%	0.03	9836.08	15.22	15.13
io_heavy	srtf	16	1000	31161	15%	0.03	20736.27	31.07	30.75
io_heavy	srtf	24	10	349	16%	0.03	254.00	0.00	0.00
io_heavy	srtf	24	100	2956	15%	0.03	1898.57	1.60	1.60
io_heavy	srtf	24	500	15092	15%	0.03	9863.15	9.99	9.92
io_heavy	srtf	24	1000	31809	15%	0.03	21156.60	20.51	20.34
io_heavy	srtf	32	10	277	14%	0.04	187.80	0.00	0.00
io_heavy	srtf	32	100	2828	15%	0.04	1807.69	1.08	1.08
io_heavy	srtf	32	500	15466	15%	0.03	10029.64	7.35	7.32
io_heavy	srtf	32	1000	31676	15%	0.03	20946.37	15.18	15.13
io_heavy	srtf	48	10	300	15%	0.03	200.30	0.00	0.00
io_heavy	srtf	48	100	2730	15%	0.04	1708.81	0.56	0.56
io_heavy	srtf	48	500	14681	15%	0.03	9376.03	4.74	4.72
io_heavy	srtf	48	1000	29650	15%	0.03	18892.37	9.95	9.92