1						sions/3.4/bining/runTime	n/python3.4 " .py"	/Users/			
3 4	Assignment Two:										
5 6 7 8 9 10 11 12 13 14 15 16	Enter 1 to calculate the runtime for a Serial program: Enter 2 to calculate the runtime for a Parallel program Enter 3 to calculate the Speedup for a parallel program Enter 4 to calculate the Efficiency of aParallel program Enter 5 To view the Runtime for a serial program Enter 6 To view the Runtime for a parallel program Enter 7 To view the Speedup table(cores vs processors Enter 8 to view the Efficiency table (cores vs processors)										
17 18	cores)		•			•	es and p is th	e number of			
19 20			2	4		16		64	128		
21 22	10 l 13.2231	1.0000 12.8514			3.7037	6.4516	9.7561	12.3077			
23 24		1.0000 39.5062	1.9900		3.9216	7.5472	13.7931	22.8571			
25 26	30	1.0000 64.1425	1.9956		3.9648	7.7922	14.9378	27.1698			
27 28		1.0000 82.0513	1.9975		3.9801		15.3846	29.0909			
29 30		1.0000 94.2285			3.9872	7.9239	15.6006	30.0752			
31 32		1.0000 102.491			3.9911	7.9470	15.7205	30.6383			
33 34		1.0000 108.212			3.9935	7.9610	15.7937	30.9881			
					Page 1						

34	
35 80 1.0000 1.9994 3.9950 7.9701 15.8416 31.219 60.3774 112.2807 36 37 90 1.0000 1.9995 3.9961 7.9764 15.8746 31.380 61.1033 115.2512 38 39 100 1.0000 1.9996 3.9968 7.9808 15.8983 31.496	
37 90 1.0000 1.9995 3.9961 7.9764 15.8746 31.380 61.1033 115.2512 38	1
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)9
	41
51 160 1.0000 1.9998 3.9988 7.9925 15.9601 31.803 63.0542 123.6715	12
53 170 1.0000 1.9999 3.9989 7.9934 15.9646 31.823 63.1608 124.1509	38
55 180 1.0000 1.9999 3.9990 7.9941 15.9685 31.842 63.2504 124.5555 56	28
57 190 1.0000 1.9999 3.9991 7.9947 15.9717 31.858	

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57 58	63.3264 124.90					
59 60	200 1.0000 63.3914 12	1.9999	3.9992	7.9952	15.9744	31.8725
61 62	210 1.0000 63.4475 12	1.9999	3.9993	7.9956	15.9768	31.8843
63 64	220 1.0000 63.4962 12	1.9999	3.9993	7.9960	15.9789	31.8946
65 66	230 1.0000 63.5388 12	1.9999	3.9994	7.9964	15.9807	31.9035
67 68	240 l 1.0000 63.5762 12	1.9999	3.9994	7.9967	15.9822	31.9114
69 70	250 l 1.0000 63.6092 12	1.9999	3.9995	7.9969	15.9836	31.9183
71 72	260 1.0000 63.6385 12		3.9995	7.9972	15.9849	31.9244
73 74	270 l 1.0000 63.6646 12	1.9999				
75 76	280 1.0000 63.6881 12	l 1.9999	3.9996	7.9976	15.9869	31.9348
77 78	290 l 1.0000 63.7091 12	2.0000	3.9996	7.9977	15.9878	31.9392
79 80	300 1.0000 63.7281 12	2.0000 26.7383	3.9996	7.9979		31.9432
			-	-		
			Page 3			

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81	3101	1.0000	2.0000	3.9997	7.9980	15.9894	31.9468
02	63.	7453 126	5.8176				
82							
83		1.0000	2.0000	3.9997	7.9981	15.9900	31.9501
65		7609 126		3.7771	7.5561	13.7700	31.7301
84	05.	7009 120	3.0077				
85							
86		_					
87	_	nent Two:					
88	======================================			C C			
89	Enter 1 t	o calculate th	ie runtime	for a Serial pr	ogram:		
90 91				for a Parallel postor of the formal formal for a parallel for a parallel for a parallel for a formal formal for a formal formal formal formal for a formal formal formal formal formal formal formal formal for a formal for			
92				cy of a Parallel			
93				or a serial prog			
94	Enter 6	Γο view the I	Runtime fo	or a parallel pro	ogram		
95	Enter 7	Γo view the S	Speedup ta	ıble(cores vs p	rocessors		
96	Enter 8 t	o view the E	fficiency t	able (cores vs			
97		to exit the pr					
98	Please m	nake a selecti	on: 8				
99			Ecci	. (:. 41	.1 £		411
100	oorog)		Efficiency	(n is the num	iber of proces	sses and p is	the number of
101	cores)						
101	l						
102	1	1	2	4 8	16	32	64
	128						
103							
104	10	1 0000	·-ı 0.9804	0.9259	0.8065	0.6098	0.3846
104		0.1004	0.9604	0.9239	0.8003	0.0098	0.3640
105	0.2000	0.1004					
100							
106			0.9950	0.9804	0.9434	0.8621	0.7143
1.	0.5102	0.3086					
107							
100		1 0000	•	0.0012	0.0740	0.0226	0.9401
108		0.5011	0.9978	0.9912	0.9740	0.9330	0.8491
109	0.7009	0.5011					
110	40 l	1.0000	0.9988	0.9950	0.9852	0.9615	0.9091
		0.6410					
111							
112		1 0000	•	0.0060	0.0007	0.0750	0.0200
112			0.9992	0.9968	0.9905	0.9750	0.9398
1	0.8009	0.7362					
112							
113							

114 60 1 1,0000 0,9994 0,9978 0,9934 0,9825 0,9574 115	File - un							
116 70 1.0000 0.9996 0.9984 0.9951 0.9871 0.9684	114	60 I	1.0000 0.8007	0.9994				
118 80 1 0.9434 0.8772 1.0000 0.9997 0.9988 0.9963 0.9901 0.9756 0.9901 0.9756 119 120 90 1 1.0000 0.9998 0.9990 0.9970 0.9922 0.9806 121 122 1001 1.0000 0.9998 0.9992 0.9976 0.9936 0.9843 123 123 124 1101 0.000 0.9692 0.9311 0.9998 0.9993 0.9980 0.9947 0.9869 125 126 120 0.9740 0.9414 0.9414 127 130 1 0.0000 0.9478 0.9999 0.9995 0.9986 0.9962 0.9906 0.9988 0.9967 0.9919 0.9888 0.9563 131 1401 0.0000 0.9999 0.9999 0.9996 0.9988 0.9967 0.9919 0.9832 0.9617 132 1501 0.0000 0.9999 0.9999 0.9996 0.9989 0.9972 0.9929 0.9938 0.9852 0.9662 134 1601 0.0000 0.9999 0.9999 0.9997 0.9991 0.9997 0.9991 0.9975 0.9938 0.9852 0.9662 135 136 1701 0.0000 0.9999 0.9999 0.9997 0.9997 0.9991 0.9975 0.9938 0.9945 0.9869 0.9869 0.9969 0.9969 0.9997 0.9992 0.9978 0.9945 0.9945 0.9989 0.9969 0.9969 0.9989 0.9960 0.9989 0.9978 0.9945 0.9989 0.9969 0.9989 0.9969 0.9989 0.9960 0.9989 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991 0.9997 0.9991		70 l 0.9273	1.0000 0.8454	0.9996				
120 90 1,0000 0,9998 0,9990 0,9970 0,9922 0,9806 121		80 l 0.9434	1.0000 0.8772	-l 0.9997	0.9988	0.9963	0.9901	0.9756
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124 1101 1.0000 0.9998 0.9993 0.9980 0.9947 0.9869 125 126 1201 1.0000 0.9999 0.9994 0.9983 0.9956 0.9890 127 128 1301 1.0000 0.9999 0.9995 0.9986 0.9962 0.9906 129 130 1401 1.0000 0.9999 0.9996 0.9988 0.9967 0.9919 131 131 132 1501 1.0000 0.9999 0.9996 0.9989 0.9972 0.9929 0.9832 0.9617 133 134 1601 1.0000 0.9999 0.9997 0.9991 0.9975 0.9938 135 136 1701 1.0000 0.9999 0.9997 0.9992 0.9978 0.9978 0.9945 136 1701 1.0000 0.9999 0.9997 0.9992 0.9978 0.9978 0.9945		100	1.0000 0.9178	0.9998				
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128 130 1.0000 0.9999 0.9995 0.9986 0.9962 0.9906 129		120 l	1.0000	-l 0.9999	0.9994	0.9983	0.9956	0.9890
130		130 l 0.9778	1.0000 0.9497	. 0.9999	0.9995	0.9986	0.9962	0.9906
132 150 1.0000 0.9999 0.9996 0.9989 0.9972 0.9929 0.9832 0.9617 133		140 l 0.9808	1.0000 0.9563	·l 0.9999	0.9996	0.9988	0.9967	0.9919
134 160 1.0000 0.9999 0.9997 0.9991 0.9975 0.9938 0.9852 0.9662 135		150 l 0.9832	1.0000 0.9617	·l 0.9999	0.9996	0.9989	0.9972	0.9929
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137							
138 139		1.0000 0.9731	-l 0.9999	0.9998	0.9993	0.9980	0.9951
140 141	190 l	1.0000 0.9758	•	0.9998	0.9993	0.9982	0.9956
142 143	200 l	1.0000 0.9781	-1	0.9998		0.9984	0.9960
144 145	210	1.0000 0.9801	-	0.9998		0.9986	0.9964
146 147	220 I	1.0000 0.9818	1.0000		0.9995	0.9987	0.9967
148 149	230	1.0000 0.9833	-	0.9998			0.9970
150 151	240 I	1.0000 0.9847	•	0.9999	0.9996	0.9989	0.9972
152 153	250	0.9859	1.0000	0.9999		0.9990	0.9974
154 155	260 0.9944	1.0000 0.9869	1.0000	0.9999	0.9996	0.9991	0.9976
156 157	270 l 0.9948	1.0000 0.9879	1.0000	0.9999	0.9997	0.9991	0.9978
158 159	280 I	1.0000 0.9887	1.0000		0.9997	0.9992	0.9980
160			-l			0.9992	0.9981

160 161	0.9955	0.9895							
162 163	300 l	1.0000 0.9901	1.0000	0.9999	0.9997	0.9993	0.9982		
164 165	310 l 0.9960	1.0000	1.0000	0.9999	0.9998	0.9993	0.9983		
166 167		1.0000 0.9913	1.0000	0.9999	0.9998	0.9994	0.9984		
168 169 170 171 172 173 174 175 176 177 178 179 180 181	Assignment Two: ===================================								