Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
100	9364	12151	9364	12151	2779	237.2542	391	102.2	24.4027	146.8745	157.9812
101	2917	5484	2917	5484	2557	240.8348	362	102.2	26.3286	150.1306	161.9077
102	4969	7474	4969	7474	2496	233.1987	319	102.2	26.5285	146.9742	158.7902
103	8644	11512	8644	11512	2859	237.0104	406	102.2	24.6747	149.0116	160.1014
104	6867	9476	6867	9476	2602	235.2456	361	102.2	24.7641	151.5232	163.6197
105	13723	16347	13723	16347	2613	229.3505	363	104.0	23.9036	142.2351	153.6592
106	3450	6292	3450	6292	2830	239.1739	370	102.2	25.9088	149.2959	160.3543
107	12339	14780	12339	14780	2435	248.2530	355	104.0	25.1038	152.9059	165.5565
108	4596	7242	4596	7242	2636	230.2723	335	102.2	26.7603	145.3087	156.6845
109	9245	11722	9245	11722	2471	238.8238	349	102.2	24.3185	147.6039	159.4629
110	4094	6695	4094	6695	2590	229.7831	328	102.2	25.2348	145.7426	156.9910
111	1055	3607	1055	3607	2540	237.1740	381	105.8	28.6649	149.7954	161.5826
112	1763	4507	1763	4507	2737	238.1996	411	102.2	26.8445	149.9906	161.4467
113	9962	12555	9962	12555	2586	234.3099	376	102.2	25.7496	147.0955	158.7460
114	10869	13686	10869	13686	2811	237.9971	423	102.2	26.3561	149.7017	161.0617
115	1756	4242	1756	4242	2480	239.4740	384	102.2	27.3691	149.5182	161.6334
116	13635	16348	13635	16348	2700	228.6706	382	104.0	23.7844	142.0945	153.3692
117	11016	13710	11016	13710	2688	237.1967	402	102.2	26.4126	149.6348	161.2469
118	3233	5950	3233	5950	2707	242.2003	359	102.2	26.1399	150.5092	161.9489
119	2403	5052	2403	5052	2640	239.7015	385	102.2	25.5879	151.4505	163.1116
120	8884	11311	8884	11311	2421	238.4906	346	102.2	24.4302	148.0864	160.0574
121	7196	10064	7196	10064	2860	235.2410	408	102.2	23.9602	150.0856	161.3955
122	2931	5368	2931	5368	2427	241.5238	339	102.2	26.4348	149.2251	161.3286
123	4617	7498	4617	7498	2869	233.4247	371	102.2	26.3840	147.5509	158.5885
124	1922	4576	1922	4576	2649	237.2761	397	102.2	26.7174	149.6860	161.2773
125	9183	12075	9183	12075	2884	235.5416	400	102.2	24.1672	147.0598	157.9333
126	6600	9102	6600	9102	2493	234.8507	360	102.2	25.4635	151.0644	163.4113
127	3391	5915	3391	5915	2515	239.4313	326	102.2	26.3210	149.1563	160.8715
128	11046	13773	11046	13773	2721	237.5574	401	102.2	26.1316	149.7927	161.3451
129	6868	9714	6868	9714	2838	235.2415	388	102.2	24.4398	150.7590	162.2347
130	12246	14912	12246	14912	2657	248.0754	385	104.0	25.4967	152.6275	164.6981
131	13124	15692	13124	15692	2555	241.8741	364	104.0	25.4824	148.2607	160.2277
132	8852	11390	8852	11390	2531	236.9921	363	102.2	25.2902	147.7096	159.4733
133	9797	12350	9797	12350	2546	234.5817	370	102.2	25.5680	146.4933	158.1383
134	10954	13562	10954	13562	2603	238.9846	383	102.2	26.2783	150.0227	161.8551
135	8559	10974	8559	10974	2406	239.8456	338	102.2	23.9324	149.6530	161.7826
136	5026	7735	5026	7735	2699	235.9604	348	102.2	26.8670	148.1525	159.6711
137	10205	12985	10205	12985	2773	236.1996	419	102.2	25.6757	148.6691	160.0925
138	6870	9357	6870	9357	2480	233.2257	349	102.2	24.7965	150.6487	162.9820
139	9895	12755	9895	12755	2853	235.4213	418	102.2	25.7295	147.5772	158.6990
140	10930	13673	10930	13673	2738	238.3073	411	102.2	26.2855	149.9860	161.5436
141	5334	7906	5334	7906	2564	234.2689	342	102.2	25.7652	149.4141	161.1490
142	13463	16048	13463	16048	2571	234.6028	365	104.0	24.8992	145.2905	156.9748
143	11053	13506	11053	13506	2448	238.7334	358	100.4	26.6167	149.5130	161.7133

	Case II		Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
144	4623	7340	4623	7340	2706	229.5139	353	102.2	26.8540	145.4680	156.7515
145	6367	8841	6367	8841	2466	232.8972	351	102.2	25.3669	149.8794	162.2228
146	5534	8299	5534	8299	2757	233.0122	375	102.2	25.7041	148.3778	159.7173
147	4004	6686	4004	6686	2670	229.4200	342	102.2	25.5439	145.6646	156.7871
148	5055	7469	5055	7469	2405	233.1351	312	102.2	26.6545	146.3660	158.4722
149	13277	15878	13277	15878	2588	238.3149	362	104.0	25.2957	147.1472	158.9123
150	11330	13865	11330	13865	2528	239.8397	375	102.2	26.1776	150.4182	162.4639
151	10504	13337	10504	13337	2826	238.7297	417	102.2	26.1704	149.3991	160.7396
152	9700	12227	9700	12227	2521	234.9469	367	102.2	25.0420	146.4451	158.0714
153	5220	7791	5220	7791	2563	232.1622	337	102.2	25.9220	148.2554	159.9576
154	3294	6103	3294	6103	2798	238.8680	365	102.2	25.9815	149.1102	160.1879
155	13724	16606	13724	16606	2871	228.8299	403	104.0	23.7930	141.7756	152.5678
156	381	3047	381	3047	2654	229.5440	402	105.8	28.7428	147.9289	159.2889
157	13038	15843	13038	15843	2792	240.3827	398	104.0	25.3921	147.9518	159.3133
158	6807	9242	6807	9242	2428	234.5039	347	102.2	25.2070	151.1826	163.6412
159	2048	4811	2048	4811	2756	239.2416	405	102.2	25.6417	150.8006	162.1863
160	7723	10361	7723	10361	2632	231.6210	388	102.2	23.3477	147.2413	158.8400
161	13312	15935	13312	15935	2609	237.4344	362	104.0	24.9193	146.5988	158.2674
162	9826	12377	9826	12377	2544	233.7790	367	102.2	25.5733	146.3268	157.9578
163	4154	6768	4154	6768	2603	228.5148	328	102.2	25.2652	145.4673	156.6917
164	4212	7018	4212	7018	2796	229.7335	351	102.2	25.9983	146.7310	157.6667
165	11898	14790	11898	14790	2884	244.8652	420	104.0	25.4537	151.2096	162.6892
166	10401	13085	10401	13085	2677	237.3483	390	102.2	26.0314	148.9344	160.5710
167	8112	10814	8112	10814	2692	236.8194	387	102.2	24.0504	148.9496	160.5764
168	8759	11476	8759	11476	2709	237.6669	388	102.2	24.9160	148.4840	159.8342
169	7990	10477	7990	10477	2481	231.2818	362	102.2	23.5821	145.9905	158.0200
170	13624	16112	13624	16112	2474	232.4809	345	104.0	24.1687	143.4482	155.3157
171	7590	10288	7590	10288	2692	235.2411	387	102.2	23.6537	149.2192	160.8610
172	1167	3577	1167	3577	2400	238.5230	361	105.8	28.8410	149.6992	161.8700
173	12621	15066	12621	15066	2434	248.5779	343	104.0	24.8871	151.5543	164.0751
174	2669	5086	2669	5086	2407	241.1076	345	102.2	25.3367	151.2079	163.4194
175	7249	9928	7249	9928	2671	234.6539	380	102.2	23.2492	150.1377	161.8413
176	8432	11066	8432	11066	2624	236.1835	372	102.2	23.7199	148.2658	159.8387
177	12170	15004	12170	15004	2823	246.3270	410	104.0	25.6474	152.2348	163.8863
178	5049	7949	5049	7949	2890	235.9774	379	102.2	26.2954	149.1097	160.1962
179	5268	7974	5268	7974	2698	233.1479	356	102.2	25.6226	149.1393	160.4856
180	2708	5191	2708	5191	2473	242.8339	348	102.2	26.1608	150.6195	162.6793
181	4521	7117	4521	7117	2586	230.3906	325	102.2	26.6810	146.3246	157.8200
182	7955	10691	7955	10691	2728	233.0604	396	102.2	23.5021	147.6264	159.1250
183	7968	10419	7968	10419	2445	230.8188	362	102.2	23.4260	146.0814	158.1902
184	11588	14011	11588	14011	2417	241.6846	365	102.2	25.5351	150.6429	163.0344
185	11225	13836	11225	13836	2604	238.6758	385	102.2	26.3312	150.0623	161.9477
186	1981	4872	1981	4872	2884	238.5607	425	102.2	25.4867	150.8226	161.9402
187	8627	11468	8627	11468	2831	237.8032	405	102.2	24.7436	148.9708	160.1087

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
188	1708	4195	1708	4195	2481	240.2810	388	102.2	27.4556	149.7430	161.8548
189	13138	15593	13138	15593	2442	244.0471	348	104.0	25.5711	149.4452	161.7931
190	13051	15735	13051	15735	2671	240.9196	381	104.0	25.3772	148.0704	159.7589
191	4128	6894	4128	6894	2755	231.3825	354	102.2	25.3535	147.0081	158.0431
192	8672	11085	8672	11085	2406	237.3461	345	102.2	24.1802	148.1227	160.1973
193	13658	16274	13658	16274	2603	230.2550	368	104.0	23.8165	142.5594	154.0522
194	6483	9133	6483	9133	2641	233.0292	377	102.2	25.3144	149.3924	161.2695
195	3904	6358	3904	6358	2444	232.7604	309	102.2	25.2082	147.4043	159.0867
196	7420	9865	7420	9865	2439	234.4898	343	102.2	23.3689	150.0028	162.2564
197	5927	8632	5927	8632	2695	230.6315	377	102.2	25.2083	148.6508	160.3199
198	3919	6808	3919	6808	2877	228.4834	365	102.2	25.4984	145.8524	156.5744
199	5078	7818	5078	7818	2731	233.9681	359	102.2	26.4140	147.8089	159.2259
200	2378	5133	2378	5133	2745	241.1984	396	102.2	25.6079	151.8760	163.3589
201	8942	11370	8942	11370	2422	235.7018	348	102.2	24.5270	146.6568	158.5918
202	12636	15479	12636	15479	2830	246.6306	405	104.0	25.3926	151.4983	163.0904
203	1939	4544	1939	4544	2600	236.8945	391	102.2	26.7131	149.4980	161.2197
204	1657	4297	1657	4297	2633	240.0570	406	102.2	27.4684	149.7127	161.3666
205	3050	5641	3050	5641	2581	240.6017	361	102.2	26.6158	149.2760	160.9789
206	8010	10873	8010	10873	2853	235.9275	413	102.2	24.1945	148.9997	160.3098
207	4812	7286	4812	7286	2467	230.2642	317	102.2	26.8473	145.7280	157.5854
208	3326	5767	3326	5767	2433	237.8090	316	102.2	26.1796	148.4520	160.3758
209	3747	6591	3747	6591	2832	232.7558	364	102.2	25.8024	147.1519	158.0685
210	8785	11347	8785	11347	2555	237.6096	370	102.2	24.1964	147.9406	159.6320
211	10219	13097	10219	13097	2871	237.5084	433	102.2	25.8409	149.0853	160.3045
212	6614	9245	6614	9245	2623	232.9876	370	102.2	25.2447	150.6221	162.5628
213	2589	5386	2589	5386	2786	241.2807	401	102.2	26.1774	150.4192	161.8091
214	5606	8245	5606	8245	2631	232.2607	362	102.2	25.3455	148.1051	159.7422
215	9599	12068	9599	12068	2462	235.2346	352	102.2	24.6671	146.5184	158.2444
216	11088	13987	11088	13987	2892	238.8258	433	102.2	25.7451	150.2921	161.5191
217	11340	13827	11340	13827	2480	239.4689	366	102.2	26.1076	150.2078	162.3534
218	12775	15208	12775	15208	2422	244.3543	344	104.0	24.6067	150.3206	162.8182
219	2853	5709	2853	5709	2846	237.0637	395	102.2	26.3231	148.9430	160.0275
220	3272	5849	3272	5849	2568	238.2634	337	102.2	26.0947	149.2471	160.8939
221	4051	6484	4051	6484	2422	232.5252	306	102.2	25.1224	147.6386	159.3986
222	7098	9640	7098	9640	2534	233.8789	358	102.2	23.6245	149.3601	161.4742
223	11226	13847	11226	13847	2614	238.9414	385	102.2	26.3012	150.1865	162.0400
224	7214	9995	7214	9995	2773	234.7216	398	102.2	23.5278	150.0693	161.5701
225	11002	13525	11002	13525	2518	237.9452	367	102.2	26.6378	149.2078	161.1941
226	2305	5039	2305	5039	2725	238.5134	399	102.2	25.3321	151.6849	163.1701
227	5131	7717	5131	7717	2578	233.7924	336	102.2	26.7011	148.0857	159.8654
228	4168	7008	4168	7008	2830	230.5758	357	102.2	25.8368	146.8212	157.6657
229	2541	5244	2541	5244	2693	243.2904	387	102.2	26.3470	151.4882	163.1297
230	4383	6906	4383	6906	2514	228.6958	321	102.2	25.6489	144.8952	156.3880
231	12793	15347	12793	15347	2541	246.7385	367	104.0	25.3052	151.3059	163.5796

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
232	10264	12969	10264	12969	2698	235.7472	403	102.2	25.8566	148.2529	159.8116
233	2568	5303	2568	5303	2725	242.2768	393	102.2	26.1778	150.7092	162.2346
234	3974	6518	3974	6518	2533	231.1496	323	102.2	25.5387	147.3864	158.8781
235	3291	5920	3291	5920	2619	239.1601	343	102.2	26.0444	148.9704	160.4447
236	11596	14181	11596	14181	2578	240.6095	385	102.2	25.1690	151.0558	163.0660
237	12914	15739	12914	15739	2812	241.9431	407	104.0	25.4993	148.7520	160.1413
238	8621	11360	8621	11360	2730	236.6626	393	102.2	24.0264	148.6716	160.0053
239	8421	11020	8421	11020	2589	236.3229	369	102.2	23.7174	148.2948	159.9671
240	7739	10202	7739	10202	2457	231.4147	349	102.2	23.3259	147.0409	159.0405
241	8980	11500	8980	11500	2513	236.5290	355	102.2	25.1775	147.8254	159.5410
242	11451	14263	11451	14263	2804	239.6031	406	104.0	24.7076	150.4142	161.8475
243	7124	9734	7124	9734	2602	234.2150	366	102.2	23.4956	149.5119	161.3874
244	7954	10528	7954	10528	2568	231.4274	377	102.2	23.5656	146.3291	158.1008
245	8660	11104	8660	11104	2436	237.3733	347	102.2	24.0819	148.1778	160.1670
246	10960	13508	10960	13508	2543	238.1786	376	102.2	26.5169	149.4628	161.4644
247	4208	7101	4208	7101	2883	230.5163	359	102.2	26.1294	147.2687	158.1111
248	9946	12466	9946	12466	2513	234.9984	365	102.2	25.8442	147.3108	159.1349
249	12145	14830	12145	14830	2678	246.1816	396	104.0	25.9200	152.3588	164.4157
250	13458	16220	13458	16220	2748	232.7622	388	104.0	24.3819	144.8134	156.1131
251	4384	6849	4384	6849	2456	227.2528	313	102.2	25.7226	144.1771	155.7447
252	7808	10421	7808	10421	2607	231.8739	383	102.2	23.3293	147.0260	158.6925
253	6802	9439	6802	9439	2630	233.4786	371	102.2	24.8870	150.6335	162.5650
254	8880	11704	8880	11704	2816	236.4011	392	102.2	24.6638	147.7675	158.8376
255	2664	5236	2664	5236	2562	242.2763	364	102.2	25.9178	150.3050	162.1696
256	3932	6520	3932	6520	2577	230.7287	326	102.2	25.4289	147.1792	158.5344
257	13227	15916	13227	15916	2676	237.7061	375	104.0	25.1756	147.0434	158.5881
258	5432	8026	5432	8026	2586	232.1637	341	102.2	25.8986	147.9536	159.5174
259	49	2698	49	2698	2634	231.6807	399	105.8	29.0353	148.1066	159.4196
260	5525	8358	5525	8358	2825	233.0753	383	102.2	26.0019	148.6657	159.9588
261	2186	5059	2186	5059	2864	236.8098	412	102.2	25.7642	150.9241	162.0556
262	6593	9245	6593	9245	2643	232.4783	373	102.2	25.2226	150.3451	162.2376
263	7367	10026	7367	10026	2652	235.1622	371	102.2	23.3310	149.9041	161.6495
264	6009	8659	6009	8659	2640	231.7446	371	102.2	25.1348	149.3372	161.1537
265	9787	12200	9787	12200	2408	234.9966	349	102.2	25.1522	146.5991	158.5313
266	3234	5838	3234	5837	2595	240.1282	343	102.2	26.3535	149.9296	161.6165
267	6370	9251	6370	9251	2870	230.9439	404	102.2	25.4807	149.6066	160.9495
268	4804	7539	4804	7539	2726	230.9617	354	102.2	26.5093	146.7301	158.0043
269	7406	10120	7406	10120	2707	235.1003	379	102.2	23.8122	149.7313	161.3777
270	11139	13772	11139	13772	2627	237.4573	392	102.2	26.2628	149.7564	161.5310
271	12184	14759	12184	14759	2568	247.0123	377	104.0	25.6637	152.5927	164.8800
272	10702	13342	10702	13342	2635	236.9079	393	102.2	26.3900	148.1726	159.8601
273	11471	14112	11471	14112	2633	239.1633	393	102.2	25.0509	150.0877	161.8774
274	4675	7327	4675	7327	2642	229.6003	347	102.2	26.6034	145.3698	156.8097
275	13247	15976	13247	15976	2715	235.8519	377	104.0	25.0385	146.0012	157.3800

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
276	9744	12494	9744	12494	2743	235.8848	402	102.2	25.5777	147.5520	158.8447
277	2422	5260	2422	5260	2828	242.4870	407	102.2	26.2980	151.6302	163.0098
278	13876	16726	13876	16726	2839	226.7108	392	104.0	24.0365	140.9998	151.7484
279	849	3695	849	3695	2833	234.7223	428	105.8	28.6888	149.2990	160.3431
280	8377	11154	8377	11154	2767	235.6549	393	102.2	23.5245	148.1094	159.3412
281	330	3126	330	3126	2783	229.9027	427	105.8	28.5295	147.0992	158.1261
282	8424	10881	8424	10881	2447	236.1474	345	102.2	23.8231	148.5767	160.5733
283	4866	7534	4866	7534	2659	232.6007	344	102.2	26.6504	146.7222	158.1533
284	11476	13974	11476	13974	2492	240.0103	375	102.2	25.3382	150.2806	162.4192
285	13775	16383	13775	16383	2597	229.6178	365	104.0	24.1331	142.2844	153.7495
286	8458	11330	8458	11330	2862	235.1690	408	102.2	23.7681	148.1424	159.1818
287	15	2610	15	2610	2580	230.6503	384	105.8	29.0019	147.6125	158.9619
288	12353	15048	12353	15048	2684	248.2718	389	104.0	25.1255	152.5378	164.5032
289	99	2705	99	2705	2593	230.1081	391	105.8	29.0786	147.5170	158.9149
290	3228	6089	3228	6089	2850	241.4213	377	102.2	26.0808	150.2196	161.3145
291	2694	5513	2694	5513	2808	240.7479	402	102.2	25.9585	150.5205	161.8121
292	3671	6445	3671	6445	2762	235.1789	359	102.2	25.4781	148.1085	159.2282
293	2562	4965	2562	4965	2396	240.2290	356	102.2	25.5815	150.5044	162.7668
294	11325	13800	11325	13800	2469	238.5833	364	102.2	26.1495	149.8273	161.9540
295	2732	5535	2732	5535	2792	240.6261	394	102.2	25.9781	150.3511	161.6296
296	11627	14111	11627	14111	2477	240.5663	377	102.2	25.3925	150.6083	162.8774
297	583	3212	583	3212	2617	230.5657	397	105.8	29.2753	147.5177	158.8927
298	10437	13251	10437	13251	2807	238.5693	413	102.2	26.0169	149.3264	160.6857
299	9164	11814	9164	11814	2643	235.3093	369	102.2	24.1370	146.8363	158.2027
300	7034	9577	7034	9577	2536	233.9277	356	102.2	23.9594	149.9028	162.0586
301	9632	12228	9632	12228	2590	234.8160	374	102.2	24.9564	146.6793	158.1030
302	13243	15892	13243	15892	2636	237.5864	370	104.0	25.1189	146.8285	158.4553
303	1312	3996	1312	3996	2677	240.6075	405	105.8	28.1818	149.3077	160.8880
304	7471	10236	7471	10236	2759	232.9574	391	102.2	23.7319	148.6580	160.0886
305	6871	9631	6871	9631	2752	234.8427	379	102.2	24.5156	150.4940	162.2065
306	7666	10342	7666	10342	2670	233.3100	391	102.2	23.8005	147.7228	159.3259
307	4268	6816	4268	6816	2538	229.4763	318	102.2	25.5492	145.5631	156.9751
308	11088	13762	11088	13762	2668	238.0180	397	102.2	26.1774	149.8321	161.5090
309	2567	5021	2567	5021	2445	239.6311	359	102.2	25.4228	150.4535	162.5354
310	11912	14704	11912	14704	2784	245.1195	408	104.0	25.5742	151.8455	163.5381
311	4363	7015	4363	7015	2643	228.9054	333	102.2	26.1144	145.9136	157.1708
312	13291	15721	13291	15721	2417	239.1610	340	104.0	25.5970	147.1419	159.4067
313	10716	13449	10716	13449	2728	237.4431	403	102.2	26.4563	148.7918	160.2478
314	7661	10144	7661	10144	2477	232.6323	353	102.2	24.1249	147.0963	159.1709
315	12709	15378	12709	15378	2656	247.5721	383	104.0	25.3521	151.7152	163.7389
316	10169	12610	10169	12610	2434	233.1916	362	102.2	25.5071	146.6276	158.6444
317	2313	4765	2313	4765	2446	241.9253	365	102.2	25.4518	152.0131	164.2207
318	8385	11146	8385	11146	2751	235.6864	391	102.2	23.5484	148.1331	159.4082
319	11918	14453	11918	14453	2530	245.8965	378	104.0	25.5807	152.6433	164.9362

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
320	10558	13059	10558	13059	2494	238.1103	366	102.2	26.1921	149.5516	161.7066
321	5802	8489	5802	8489	2679	232.8391	373	102.2	25.3890	148.7120	160.4130
322	13923	16585	13923	16585	2652	227.8063	373	104.0	24.1427	141.1985	152.4199
323	5543	8077	5543	8077	2526	230.6510	332	102.2	25.7111	147.6187	159.3433
324	3880	6318	3880	6318	2428	234.1583	311	102.2	25.2863	147.8273	159.5912
325	3602	6151	3602	6151	2539	238.1597	323	102.2	26.2972	149.1118	160.8000
326	7284	9727	7284	9726	2435	232.1075	342	102.2	23.1652	149.0452	161.2817
327	7878	10694	7878	10694	2807	232.8008	406	102.2	23.5460	147.8462	159.1214
328	4180	6917	4180	6917	2727	230.4884	347	102.2	25.3858	146.2912	157.3442
329	8640	11385	8640	11385	2737	236.5606	395	102.2	24.8947	148.4559	159.8050
330	8806	11470	8806	11470	2657	237.5758	382	102.2	24.9562	148.1640	159.6102
331	4136	6665	4136	6665	2518	230.1489	318	102.2	25.2621	146.1346	157.5612
332	3684	6464	3684	6464	2768	235.1805	356	102.2	25.5169	148.2726	159.3777
333	11992	14449	11992	14449	2452	245.7960	371	104.0	25.6373	152.9300	165.4647
334	10823	13306	10823	13306	2479	236.2354	371	102.2	26.1286	147.9577	159.9843
335	294	3009	294	3009	2702	228.7040	408	105.8	28.5762	147.4326	158.6637
336	8810	11639	8810	11639	2821	236.3497	399	102.2	24.5817	147.3560	158.3704
337	1378	4086	1378	4086	2700	238.5167	412	105.8	28.1989	148.9076	160.4420
338	11673	14500	11673	14500	2821	241.5775	418	104.0	25.6235	151.1210	162.6897
339	1775	4230	1775	4230	2449	239.0982	382	102.2	27.4222	149.3837	161.6102
340	561	2999	561	2999	2428	228.6465	359	105.8	29.1245	147.4411	159.2937
341	6510	8949	6510	8949	2433	235.3449	345	102.2	24.9833	150.6835	163.2080
342	943	3426	943	3426	2471	232.8944	375	105.8	28.7494	147.9392	159.7985
343	2323	4985	2323	4985	2655	239.0030	394	102.2	25.3148	151.6360	163.2868
344	2156	4931	2156	4931	2768	236.8440	410	102.2	25.4741	151.0026	162.3508
345	4438	7096	4438	7096	2649	230.9688	331	102.2	26.3360	146.7027	158.0659
346	2561	4975	2561	4975	2407	240.4169	357	102.2	25.5561	150.6773	162.9031
347	5891	8471	5891	8471	2572	233.3635	362	102.2	25.5283	149.2556	161.2219
348	9633	12038	9633	12038	2399	235.7263	346	102.2	24.7848	147.1584	159.0567
349	443	3320	443	3320	2862	233.0506	444	105.8	29.0300	148.6457	159.6562
350	11598	14087	11598	14087	2483	240.4410	375	102.2	25.4615	150.3862	162.6255
351	8807	11644	8807	11644	2829	236.0625	400	102.2	24.5817	147.2808	158.2746
352	10517	13070	10517	13070	2546	237.1630	374	102.2	26.1283	148.9110	160.8894
353	13786	16386	13786	16386	2589	229.0660	364	104.0	24.2072	142.0094	153.4962
354	12716	15434	12716	15434	2705	246.7692	390	104.0	25.2598	151.2757	163.1532
355	9445	12132	9445	12132	2680	236.8501	379	102.2	24.4372	146.7022	157.9725
356	8387	11035	8387	11035	2638	236.2094	381	102.2	23.6321	148.2692	159.8180
357	284	3016	284	3016	2719	229.0366	409	105.8	28.7035	147.5831	158.7883
358	9632	12159	9632	12159	2521	235.1614	365	102.2	24.6819	146.6241	158.2073
359	10281	13081	10281	13081	2793	237.4935	416	102.2	25.9751	149.0550	160.4552
360	8852	11583	8852	11583	2723	236.8155	383	102.2	24.8732	147.9404	159.2127
361	1573	4082	1573	4082	2502	238.6675	388	105.8	28.4068	148.4437	160.4268
362	13079	15620	13079	15620	2528	243.3362	360	104.0	25.5374	148.7859	160.8573
363	3616	6465	3616	6465	2837	234.6946	366	102.2	25.7823	148.1797	159.1632

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
364	11682	14146	11682	14146	2458	240.1864	372	102.2	25.3103	150.8038	163.1197
365	12379	14806	12379	14806	2421	248.7191	357	104.0	25.1824	152.7825	165.4877
366	8094	10700	8094	10700	2597	235.4533	374	102.2	23.5829	148.2897	160.0899
367	6573	9351	6573	9351	2769	231.4979	391	102.2	24.9299	149.6955	161.2962
368	2685	5100	2685	5100	2405	241.5318	345	102.2	25.4454	150.9624	163.1424
369	7010	9467	7010	9467	2450	233.9174	344	102.2	24.2163	150.5189	162.9293
370	1893	4578	1893	4578	2680	236.5326	403	102.2	26.6948	149.4014	160.9098
371	11716	14506	11716	14506	2784	243.3225	414	104.0	25.6669	152.0488	163.7156
372	10997	13579	10997	13579	2577	238.7928	378	102.2	26.5908	149.7983	161.6344
373	8146	10984	8146	10984	2828	237.9986	404	102.2	23.9192	149.5730	160.8867
374	7956	10630	7956	10630	2666	231.6747	386	102.2	23.6438	146.7527	158.2953
375	4757	7348	4757	7348	2582	226.6059	335	102.2	26.7146	144.6278	156.1437
376	416	3102	416	3102	2673	230.4749	408	105.8	28.8632	147.8559	159.1378
377	6214	8676	6214	8676	2454	231.5772	347	102.2	25.3548	148.9745	161.2178
378	10202	12654	10202	12654	2445	234.0025	365	102.2	25.8089	147.0200	159.0323
379	10753	13576	10753	13576	2817	240.4218	415	102.2	26.7136	150.8858	162.2558
380	4532	7168	4532	7168	2626	230.0954	331	102.2	26.6712	145.9769	157.3605
381	2485	4977	2485	4977	2485	240.9766	365	102.2	25.6388	151.6328	163.7257
382	12832	15677	12832	15677	2831	241.4810	416	104.0	25.6032	148.9102	160.3530
383	12209	14729	12209	14729	2513	246.7547	370	104.0	25.5713	152.4986	164.9506
384	11278	13997	11278	13997	2712	240.8223	400	102.2	26.0052	150.8187	162.4984
385	13660	16305	13660	16305	2632	230.4299	373	104.0	23.7717	142.3961	153.8280
386	13331	16062	13331	16062	2716	236.2214	382	104.0	24.8630	146.6525	158.0323
387	1141	3861	1141	3861	2710	239.6737	402	105.8	28.9957	150.0474	161.5880
388	5795	8640	5795	8640	2835	232.0263	393	102.2	25.0732	148.7891	160.1350
389	6471	9155	6471	9155	2675	233.2421	382	102.2	25.6150	149.7367	161.5627
390	8882	11645	8882	11645	2755	236.8641	385	102.2	24.6928	147.7444	158.9162
391	2618	5509	2618	5509	2880	241.0460	417	102.2	25.9732	150.5059	161.6802
392	13187	15989	13187	15989	2787	238.8915	391	104.0	25.1064	147.3008	158.6202
393	8246	10915	8246	10915	2659	237.0880	376	102.2	24.1076	149.6121	161.2032
394	10476	13292	10476	13292	2809	238.4771	414	102.2	25.8443	149.4647	160.8101
395	7659	10140	7659	10140	2475	232.8130	352	102.2	24.1069	147.1530	159.2397
396	13491	16209	13491	16209	2704	231.9258	384	104.0	23.8274	144.3202	155.6953
397	2058	4707	2058	4707	2644	238.9880	394	102.2	25.7720	150.5677	162.1842
398	10562	13375	10562	13375	2806	238.8085	413	102.2	26.0863	149.5269	160.9214
399	5231	7937	5231	7937	2698	232.8484	357	102.2	25.6950	148.9135	160.2874
400	5734	8384	5734	8384	2643	235.1522	365	102.2	25.8186	149.8910	161.6694
401	13914	16617	13914	16617	2693	228.3079	378	104.0	24.0459	141.0187	152.1347
402	11809	14531	11809	14531	2717	244.5204	403	104.0	25.7282	152.2081	164.0510
403	12491	15156	12491	15156	2654	245.5492	382	104.0	24.8938	150.8968	162.8319
404	800	3560	800	3560	2747	233.9833	420	105.8	28.8155	148.4464	159.6497
405	6751	9357	6751	9357	2599	234.8129	370	102.2	24.9705	151.4090	163.4837
406	13644	16425	13644	16425	2768	228.6851	388	104.0	23.7890	141.7565	152.8475
407	7262	9818	7262	9818	2548	232.4645	359	102.2	23.1063	149.0298	160.9773

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
408	806	3346	806	3346	2527	233.3070	386	105.8	29.1216	148.7266	160.4107
409	10256	12816	10256	12816	2553	235.5321	373	102.2	25.9232	147.4060	159.1706
410	4306	6908	4306	6908	2593	230.0098	331	102.2	25.5855	145.7414	157.1371
411	2719	5406	2719	5406	2676	240.9721	379	102.2	26.0391	150.2325	161.7585
412	4013	6510	4013	6510	2486	232.1332	318	102.2	25.5395	147.6196	159.2355
413	11722	14256	11722	14256	2528	242.0413	377	104.0	25.1827	151.5059	163.6935
414	12532	15308	12532	15308	2763	245.1010	402	104.0	25.2839	150.6298	162.2852
415	2858	5557	2858	5557	2689	240.6819	382	102.2	26.1925	149.7683	161.2551
416	11545	14404	11545	14404	2850	242.1945	423	104.0	25.3594	151.8106	163.3192
417	10153	12708	10153	12708	2548	234.5229	376	102.2	25.5215	147.8435	159.6070
418	12431	15150	12431	15150	2708	245.0894	395	104.0	24.8023	151.0249	162.8407
419	1605	4429	1605	4429	2817	239.1615	429	102.2	27.8977	150.1369	161.4080
420	6840	9610	6840	9610	2763	236.0638	383	102.2	24.5624	151.5497	163.2762
421	3853	6558	3853	6558	2693	231.9904	345	102.2	25.4955	147.4966	158.6267
422	11554	14144	11554	14144	2583	240.1939	387	102.2	25.1517	150.7324	162.6907
423	1202	3935	1202	3935	2723	242.2647	407	105.8	28.8036	150.5789	162.1247
424	3667	6528	3667	6528	2849	234.5703	368	102.2	25.7316	148.1358	159.0562
425	3965	6824	3965	6824	2847	229.0460	364	102.2	25.6321	145.9144	156.7102
426	4011	6539	4011	6539	2517	232.3495	322	102.2	25.7490	147.7335	159.2693
427	2173	5070	2173	5070	2888	237.9482	418	102.2	25.9207	151.5666	162.7021
428	693	3488	693	3488	2782	229.1563	425	105.8	28.7210	146.6011	157.6181
429	10201	13022	10201	13022	2814	236.4023	422	102.2	25.5627	148.6520	159.9728
430	4389	7022	4389	7022	2624	229.5789	332	102.2	26.2630	146.1563	157.4809
431	9798	12244	9798	12244	2441	235.0942	355	102.2	25.2257	146.8060	158.6926
432	8952	11695	8952	11695	2735	235.3803	382	102.2	24.8342	147.0858	158.2451
433	7842	10376	7842	10376	2528	231.6365	369	102.2	23.4497	146.7754	158.6099
434	3100	5871	3100	5871	2761	239.6804	373	102.2	26.3674	149.3592	160.6329
435	12177	14803	12177	14803	2619	246.9104	387	104.0	25.6047	152.2247	164.4061
436	648	3416	648	3416	2755	230.2695	424	105.8	28.8677	147.3062	158.4535
437	7902	10309	7902	10309	2401	230.8584	350	102.2	23.7338	146.2335	158.4004
438	2130	4608	2130	4608	2473	237.7952	370	102.2	25.8073	150.6219	162.6794
439	3382	5798	3382	5798	2408	238.6408	313	102.2	26.4697	149.0272	160.9969
440	10234	13000	10234	13000	2759	236.5748	414	102.2	25.7198	148.6195	160.0525
441	10345	12999	10345	12999	2647	235.0485	388	102.2	25.7135	148.1074	159.7513
442	5117	7852	5117	7852	2727	233.7578	361	102.2	26.4087	148.2072	159.6176
443	11076	13662	11076	13662	2581	238.0735	381	102.2	26.4759	150.1677	162.0299
444	6356	9156	6356	9156	2789	231.7570	396	102.2	25.5995	149.4303	160.9641
445	3786	6589	3786	6589	2791	233.1736	357	102.2	25.7680	147.6746	158.6737
446	12669	15107	12669	15107	2427	246.6476	344	104.0	24.7730	150.5858	163.1142
447	5590	8024	5590	8024	2426	231.9861	322	102.2	25.7255	147.9958	159.9564
448	3126	5873	3126	5873	2737	239.6058	369	102.2	26.4227	149.4428	160.7655
449	1253	4019	1253	4019	2759	240.9811	414	105.8	28.6122	149.8707	161.2942
450	13580	16181	13580	16181	2587	231.0826	367	104.0	24.0109	142.8460	154.4312
451	6995	9524	6995	9524	2522	234.8335	351	102.2	24.5359	150.9756	163.2084

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
452	10766	13344	10766	13344	2573	236.5488	384	102.2	26.2185	147.8580	159.6686
453	8988	11463	8988	11463	2468	237.8072	351	102.2	25.2936	148.0409	159.8983
454	7311	10020	7311	10020	2701	234.1423	375	102.2	23.3087	149.6678	161.2512
455	12301	15053	12301	15053	2741	247.4541	395	104.0	25.0480	151.9603	163.7909
456	13964	16530	13964	16530	2556	226.3114	359	104.0	24.2078	139.8980	151.2882
457	3214	5755	3214	5755	2533	239.3359	337	102.2	26.0974	149.1238	160.9314
458	12903	15461	12903	15461	2546	246.3404	367	104.0	25.3694	150.6477	162.8150
459	5064	7678	5064	7678	2604	233.1299	337	102.2	26.2512	147.1991	158.8354
460	13317	16037	13317	16037	2705	235.1924	378	104.0	24.8665	145.8935	157.2681
461	9100	11529	9100	11529	2424	238.1590	337	102.2	24.4316	148.1800	160.1567
462	3654	6187	3654	6187	2523	237.8409	323	102.2	26.2573	148.5531	160.2443
463	10127	12593	10127	12593	2459	234.4699	363	102.2	25.4512	147.2714	159.2304
464	5215	7997	5215	7997	2774	231.9490	369	102.2	25.5607	148.6010	159.7797
465	8633	11106	8633	11106	2465	238.4817	348	102.2	24.0185	148.7427	160.6723
466	8817	11509	8817	11509	2685	237.2597	383	102.2	24.9032	148.3776	159.7699
467	3841	6268	3841	6268	2417	236.2477	311	102.2	25.6281	148.0639	159.9435
468	4534	7324	4534	7324	2779	230.3562	362	102.2	26.7649	145.9716	157.0899
469	13327	15929	13327	15929	2588	237.5829	362	104.0	25.0066	146.5772	158.2999
470	13711	16516	13711	16516	2793	229.0029	391	104.0	23.8267	141.7728	152.7571
471	10237	12779	10237	12779	2535	236.3235	376	102.2	25.9293	147.5978	159.4381
472	8647	11539	8647	11539	2883	236.7560	408	102.2	24.5218	148.7430	159.7544
473	5997	8540	5997	8540	2534	230.4196	361	102.2	25.3910	148.2845	160.3311
474	12483	14905	12483	14905	2415	247.6136	347	104.0	24.9953	151.7259	164.3346
475	11215	14088	11215	14088	2865	239.1838	425	102.2	25.7635	150.3895	161.7180
476	5068	7540	5068	7540	2463	232.2611	322	102.2	26.4765	146.0456	157.9300
477	43	2448	43	2448	2390	230.6332	361	105.8	28.9962	146.6089	158.2982
478	7150	9600	7150	9600	2444	234.7520	347	102.2	23.6732	150.1925	162.5694
479	6223	8922	6223	8922	2691	231.9495	384	102.2	25.0066	149.9060	161.6674
480	7251	10014	7251	10014	2755	234.2605	390	102.2	23.3747	149.9867	161.5189
481	5612	8022	5612	8022	2402	232.7809	319	102.2	25.5817	148.3882	160.4311
482	6114	8707	6114	8707	2585	231.9119	359	102.2	25.1782	149.2352	161.1926
483	9355	11839	9355	11839	2477	237.6587	351	102.2	24.6093	147.0093	158.7718
484	2255	4724	2255	4724	2464	240.3831	367	102.2	25.6006	151.1587	163.2504
485	8172	10764	8172	10764	2583	236.0923	366	102.2	23.5847	148.5709	160.3559
486	103	2992	103	2992	2875	230.1986	428	105.8	28.3543	148.5428	159.4544
487	433	2935	433	2935	2490	229.9657	374	105.8	29.1104	147.7797	159.4829
488	12326	14917	12326	14917	2583	247.8050	371	104.0	25.1225	152.4572	164.6857
489	10009	12593	10009	12593	2577	234.8170	382	102.2	25.6734	147.2514	158.9574
490	12987	15461	12987	15461	2462	246.5300	346	104.0	25.4541	150.6941	163.0516
491	12670	15407	12670	15407	2724	247.1886	389	104.0	25.1319	151.8059	163.6765
492	2650	5447	2650	5447	2786	241.4158	395	102.2	25.8309	150.5302	161.9020
493	2663	5400	2663	5400	2726	240.8825	390	102.2	25.8989	149.9736	161.4483
494	13251	15879	13251	15879	2615	237.8131	366	104.0	25.1866	146.8896	158.5666
495	13505	15917	13505	15917	2400	233.7425	339	104.0	24.4708	144.2861	156.3489

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
496	3562	6360	3562	6360	2787	236.2428	358	102.2	25.7952	148.9174	160.0226
497	13964	16726	13964	16726	2751	226.1529	376	104.0	24.2216	140.4264	151.3271
498	13658	16425	13658	16425	2754	228.9101	388	104.0	23.7890	141.8417	152.9601
499	12505	15365	12505	15365	2847	247.9880	414	104.0	25.2260	152.0605	163.6753
500	5671	8422	5671	8422	2743	235.4751	382	102.2	25.6222	149.8456	161.3611
501	9386	12207	9386	12207	2813	236.2614	396	102.2	24.7321	146.7904	157.8140
502	7049	9746	7049	9746	2688	232.7246	378	102.2	23.7945	148.8815	160.5396
503	3617	6017	3617	6017	2392	239.1849	304	102.2	26.4511	148.9593	160.9847
504	7188	10067	7188	10067	2871	234.7713	408	102.2	24.0435	149.9961	161.2829
505	5959	8745	5959	8745	2776	230.9901	387	102.2	25.0953	148.7393	160.2456
506	100	2680	100	2680	2567	230.9931	383	105.8	29.1850	147.6119	159.0449
507	11645	14296	11645	14296	2644	241.3655	394	104.0	25.2460	151.3591	163.3013
508	6464	8881	6464	8881	2411	233.2369	344	102.2	25.3427	149.6079	162.0844
509	9367	11860	9367	11860	2486	237.9812	351	102.2	24.8132	147.0713	158.8410
510	12323	14913	12323	14913	2582	247.8178	370	104.0	25.1192	152.3338	164.5709
511	3334	6035	3334	6035	2691	239.8009	346	102.2	26.1731	149.2637	160.5795
512	3734	6218	3734	6218	2474	237.3834	313	102.2	25.8350	148.4763	160.2739
513	2041	4673	2041	4673	2627	238.2383	389	102.2	25.8273	150.4158	162.0569
514	13328	16083	13328	16083	2740	236.8924	385	104.0	24.8476	146.6557	157.9764
515	12466	15083	12466	15083	2606	247.0193	373	104.0	24.9030	151.1974	163.2684
516	13246	15892	13246	15892	2633	237.7392	369	104.0	25.1189	146.8851	158.5209
517	1989	4435	1989	4435	2441	238.5707	372	102.2	26.0771	149.7200	161.8949
518	7705	10544	7705	10544	2833	231.8429	418	102.2	23.3786	147.0834	158.1901
519	1330	4136	1330	4136	2798	239.4430	426	105.8	28.0046	149.0308	160.3895
520	10707	13237	10707	13237	2525	236.1859	377	102.2	26.2652	147.6840	159.5754
521	1848	4481	1848	4481	2626	237.9291	397	102.2	27.0802	149.7660	161.4678
522	4830	7250	4830	7250	2413	229.1822	309	102.2	26.9012	144.6070	156.4970
523	4075	6667	4075	6667	2581	230.2327	325	102.2	25.1162	146.1786	157.4866
524	3456	6356	3456	6356	2888	237.8616	375	102.2	25.8006	149.1889	160.1172
525	7116	9885	7116	9885	2761	235.1382	397	102.2	23.6839	150.0201	161.5221
526	2159	4735	2159	4735	2571	238.6847	383	102.2	25.9751	150.9799	162.7991
527	3047	5760	3047	5760	2703	239.2843	375	102.2	26.4702	148.8899	160.2740
528	13947	16429	13947	16429	2472	228.5961	339	104.0	24.1564	141.1848	152.9098
529	12610	15141	12610	15141	2520	246.1364	358	104.0	24.9658	151.1198	163.3865
530	11572	14386	11572	14386	2806	241.8287	415	104.0	25.2302	151.8211	163.4163
531	12042	14925	12042	14925	2874	245.4810	416	104.0	25.7146	151.5082	163.0262
532	13893	16498	13893	16498	2595	226.8722	364	104.0	24.0437	140.6953	152.0453
533	9574	12280	9574	12280	2698	234.4174	392	102.2	25.3798	146.0797	157.2983
534	4772	7479	4772	7479	2697	230.8343	348	102.2	26.3233	146.9142	158.2664
535	1960	4530	1960	4530	2565	238.2296	387	102.2	26.7774	149.8365	161.6629
536	3865	6573	3865	6573	2696	231.9742	346	102.2	25.4849	147.2562	158.3677
537	6338	9176	6338	9176	2827	230.9796	400	102.2	25.6491	149.2828	160.7342
538	1817	4686	1817	4686	2862	238.7457	424	102.2	26.9861	150.2710	161.4131
539	138	2822	138	2822	2671	231.6885	400	105.8	28.9116	147.9864	159.2940

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
540	12807	15680	12807	15680	2859	242.3009	417	104.0	25.5540	149.0507	160.4414
541	7689	10225	7689	10225	2530	232.1522	364	102.2	23.7058	147.3895	159.2793
542	2865	5403	2865	5403	2528	240.7336	360	102.2	26.3892	149.6841	161.5303
543	710	3403	710	3403	2680	229.9004	410	105.8	28.8082	147.2782	158.5912
544	4936	7617	4936	7617	2671	232.4593	345	102.2	26.6730	146.9853	158.4127
545	5117	7571	5117	7571	2446	230.2964	318	102.2	26.5208	145.7330	157.6154
546	13820	16537	13820	16537	2706	228.0403	384	104.0	24.1732	141.3374	152.4904
547	4547	7257	4547	7257	2700	231.6581	344	102.2	26.7671	146.3377	157.5919
548	3970	6638	3970	6638	2656	229.9072	339	102.2	25.5962	146.1330	157.3076
549	4856	7615	4856	7615	2749	231.2053	358	102.2	26.4242	146.8306	158.0556
550	9508	12095	9508	12095	2580	235.7347	366	102.2	24.6681	146.0536	157.5061
551	11423	14262	11423	14262	2831	240.0818	410	104.0	24.6784	150.6937	162.0904
552	6112	8646	6112	8646	2525	231.2965	354	102.2	25.2332	148.8048	160.8998
553	4609	7393	4609	7393	2773	230.1447	360	102.2	26.7147	145.6621	156.7916
554	3370	5810	3370	5810	2432	238.0989	316	102.2	26.4138	148.8797	160.7996
555	12682	15525	12682	15525	2829	244.5294	409	104.0	25.2711	149.9520	161.4732
556	6421	9029	6421	9029	2600	231.4190	369	102.2	25.0589	148.9136	160.8910
557	5101	7638	5101	7638	2529	230.9146	331	102.2	26.2998	146.4946	158.2282
558	6993	9844	6993	9844	2842	235.5129	394	102.2	24.2942	150.4100	161.8123
559	13892	16407	13892	16407	2505	228.0864	350	104.0	24.1424	141.1761	152.7656
560	5521	8035	5521	8035	2506	231.9992	327	102.2	25.8062	147.7462	159.4980
561	9386	11816	9386	11816	2423	238.3459	342	102.2	24.6141	147.2060	159.1638
562	3429	5881	3429	5881	2443	239.6607	314	102.2	26.4113	149.2019	161.1108
563	3419	6009	3419	6009	2580	240.7137	331	102.2	26.3435	149.4836	161.0536
564	3136	5611	3136	5611	2466	241.1987	338	102.2	26.3140	149.9878	161.9976
565	1357	4133	1357	4133	2768	239.1520	422	105.8	28.0344	149.1196	160.5285
566	2436	5014	2436	5014	2570	239.7172	376	102.2	25.5090	151.4477	163.3211
567	3673	6353	3673	6353	2670	236.7736	346	102.2	25.4899	148.4589	159.7883
568	13583	16390	13583	16390	2793	227.7994	399	104.0	23.9075	141.8836	152.9305
569	2241	4990	2241	4990	2742	239.1192	401	102.2	25.3323	151.6216	163.0727
570	10857	13704	10857	13704	2841	238.7683	429	102.2	26.2441	150.1309	161.4467
571	2599	5435	2599	5435	2825	241.0064	406	102.2	26.0527	150.7658	162.0830
572	3331	6096	3331	6096	2754	239.0447	359	102.2	26.1290	149.1766	160.3463
573	7037	9654	7037	9654	2609	234.2919	364	102.2	23.8331	149.5242	161.5007
574	4104	6686	4104	6686	2571	229.5374	325	102.2	25.2372	145.7349	157.0353
575	3649	6147	3649	6147	2488	237.7918	318	102.2	26.3367	149.0811	160.8948
576	1813	4640	1813	4640	2820	238.7521	420	102.2	26.9977	150.7016	161.9438
577	565	3064	565	3064	2489	229.9079	371	105.8	28.9729	147.4676	159.1704
578	10377	12784	10377	12784	2400	235.3213	345	102.2	26.0308	147.2832	159.4460
579	335	3179	335	3179	2830	230.8048	439	105.8	28.8867	147.6910	158.6291
580	8676	11124	8676	11124	2441	237.7743	349	102.2	24.1745	148.3889	160.3952
581	3289	5709	3289	5709	2412	237.1818	312	102.2	26.1179	148.6706	160.6511
582	1510	4129	1510	4129	2612	238.2197	400	105.8	28.1178	148.6483	160.4175
583	1055	3692	1055	3692	2625	237.4560	392	105.8	28.8008	150.0916	161.7050

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
584	13243	15807	13243	15807	2551	238.4266	361	104.0	25.2697	147.4885	159.3825
585	3375	5786	3375	5786	2403	238.4225	314	102.2	26.3821	148.8740	160.8613
586	12653	15275	12653	15275	2610	245.7265	372	104.0	25.2339	150.9235	162.9516
587	1364	4113	1364	4113	2741	239.5626	418	105.8	28.0976	149.0434	160.4888
588	11144	13842	11144	13842	2691	237.7038	404	102.2	26.2361	149.9649	161.6226
589	5956	8799	5956	8799	2833	230.9292	393	102.2	25.0078	149.1772	160.5778
590	3180	5829	3180	5829	2641	238.1051	354	102.2	26.2458	149.0661	160.5863
591	4173	6657	4173	6657	2474	230.3051	312	102.2	25.2927	145.9768	157.4727
592	12411	15111	12411	15111	2689	246.0454	391	104.0	24.7844	151.0987	162.9481
593	12158	14887	12158	14887	2721	246.4532	396	104.0	25.8467	152.3747	164.3052
594	7128	9896	7128	9896	2760	235.4909	395	102.2	23.6178	149.8982	161.4054
595	13783	16217	13783	16217	2423	231.1060	339	104.0	24.2539	142.7607	154.7250
596	361	3116	361	3116	2742	229.9059	420	105.8	28.7170	147.4305	158.5455
597	1865	4682	1865	4682	2811	238.5064	421	102.2	27.0111	150.2233	161.4700
598	11324	13925	11324	13925	2594	239.2189	385	102.2	26.0030	150.2631	162.1317
599	2230	4779	2230	4779	2542	241.0329	374	102.2	25.4483	151.4684	163.4041
600	9811	12580	9811	12580	2762	236.4551	410	102.2	25.7429	147.9626	159.2959
601	5412	7874	5412	7874	2454	233.8333	321	102.2	25.8903	148.3441	160.3176
602	11650	14436	11650	14436	2779	242.4657	413	104.0	25.5060	151.9472	163.6340
603	1253	4149	1253	4149	2888	240.0139	434	105.8	28.6806	149.7766	160.9699
604	13347	15756	13347	15756	2396	239.7186	341	104.0	25.2524	147.7505	160.1117
605	2570	5367	2570	5367	2786	241.2661	398	102.2	26.1609	150.2603	161.6500
606	2773	5397	2773	5397	2613	240.6845	369	102.2	26.0898	150.0055	161.6722
607	3226	5861	3226	5861	2626	239.9894	348	102.2	26.1624	149.5866	161.1910
608	9710	12387	9710	12387	2669	234.2155	387	102.2	25.4453	146.4264	157.7459
609	11815	14464	11815	14464	2644	245.2873	395	104.0	25.6054	152.9042	164.9611
610	2345	4771	2345	4771	2420	243.2572	363	102.2	25.5963	152.0164	164.2811
611	10808	13464	10808	13464	2651	237.0289	391	102.2	26.0527	148.6318	160.2585
612	13038	15861	13038	15861	2810	240.2173	399	104.0	25.4582	147.7211	159.0248
613	11925	14369	11925	14369	2439	247.6405	369	104.0	25.4938	153.6431	166.1954
614	6029	8813	6029	8813	2774	230.0842	390	102.2	24.8903	148.9852	160.5324
615	1250	3687	1250	3687	2430	240.3033	368	105.8	28.9376	149.8416	162.0193
616	4186	7010	4186	7010	2814	229.8377	356	102.2	25.8368	146.6113	157.4719
617	8440	11277	8440	11277	2827	234.1693	406	102.2	23.5232	147.5970	158.6605
618	13037	15813	13037	15813	2763	240.8715	396	104.0	25.5027	148.3855	159.8396
619	13341	15908	13341	15908	2554	238.0220	356	104.0	25.0066	146.9269	158.7497
620	9236	11920	9236	11920	2677	236.1307	377	102.2	24.3656	147.0678	158.4466
621	4569	7132	4569	7132	2553	230.8085	322	102.2	26.7277	146.1565	157.7440
622	2914	5596	2914	5596	2672	241.2770	373	102.2	26.5567	150.0797	161.5940
623	7615	10072	7615	10072	2451	233.5642	345	102.2	24.2047	148.2409	160.4372
624	12071	14904	12071	14904	2825	245.8644	412	104.0	25.6524	151.7964	163.4545
625	7926	10395	7926	10395	2463	230.2326	361	102.2	23.5024	146.1638	158.1926
626	11153	13809	11153	13809	2650	237.0821	396	102.2	26.0224	149.6333	161.3403
627	8559	11117	8559	11117	2549	238.3374	360	102.2	23.8879	148.9908	160.7448

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
628	622	3492	622	3492	2857	230.3830	439	105.8	28.8286	147.0360	157.9307
629	11253	13870	11253	13870	2610	240.1655	383	102.2	26.2748	150.7710	162.6888
630	1889	4641	1889	4641	2747	237.4913	411	102.2	26.7685	149.9967	161.3480
631	6380	8841	6380	8841	2453	233.5039	349	102.2	25.3669	150.0286	162.4085
632	7713	10389	7713	10389	2670	231.7961	394	102.2	23.2574	147.2855	158.7782
633	12559	15099	12559	15099	2529	248.0659	365	104.0	25.0223	151.4079	163.6518
634	12317	14826	12317	14826	2503	248.9057	365	104.0	25.2745	153.1194	165.6692
635	4853	7741	4853	7741	2878	234.1046	372	102.2	26.7044	148.0342	159.1277
636	13195	16025	13195	16025	2815	238.3110	399	104.0	25.1231	147.0310	158.2869
637	9084	11679	9084	11679	2589	238.0942	361	102.2	24.5333	148.1939	159.7312
638	11618	14375	11618	14375	2750	242.9722	409	104.0	25.3005	152.0662	163.8283
639	9260	11672	9260	11672	2406	240.3571	341	102.2	24.4053	148.0624	160.0690
640	5097	7918	5097	7918	2813	234.7344	371	102.2	26.2549	148.4797	159.6838
641	3225	5707	3225	5707	2474	239.3498	326	102.2	26.1125	149.4609	161.4299
642	3235	5685	3235	5685	2442	240.2782	322	102.2	26.2535	149.9966	162.0861
643	6117	8815	6117	8815	2690	231.3588	376	102.2	24.9846	149.3439	161.0985
644	13868	16444	13868	16444	2566	228.1209	359	104.0	23.9904	141.4005	152.8778
645	12270	15048	12270	15048	2766	247.9712	399	104.0	25.4210	152.1334	163.9020
646	7394	10212	7394	10212	2811	236.5158	392	102.2	23.5553	150.4597	161.8668
647	6907	9350	6907	9350	2436	232.7371	344	102.2	24.8837	150.7144	163.1321
648	11100	13551	11100	13551	2446	239.7504	361	100.4	26.4614	150.4489	162.6819
649	29	2582	29	2582	2538	230.6667	377	105.8	28.9014	147.6159	159.0484
650	8639	11466	8639	11466	2818	237.3865	403	102.2	24.7563	148.9064	160.0744
651	11131	13921	11131	13921	2783	238.2366	418	102.2	25.9682	150.2340	161.6834
652	4824	7421	4824	7421	2588	229.1957	338	102.2	26.7648	145.1862	156.7118
653	1511	3965	1511	3965	2448	239.0219	378	105.8	27.9836	148.9250	161.0815
654	8160	10617	8160	10617	2450	233.7745	348	102.2	23.6746	147.1494	159.1527
655	9904	12316	9904	12316	2405	233.0621	349	102.2	25.6159	145.7889	157.7271
656	8906	11742	8906	11742	2827	235.3094	396	102.2	24.5799	146.9602	157.9461
657	11212	14039	11212	14039	2819	238.8890	423	102.2	25.8186	150.0961	161.4896
658	409	3199	409	3199	2776	230.2563	430	105.8	29.0873	147.8478	158.9001
659	3789	6337	3789	6337	2538	235.8884	324	102.2	25.5591	148.6079	160.1959
660	10994	13480	10994	13480	2481	235.8010	363	102.2	26.8846	147.8743	159.8548
661	7115	9814	7115	9814	2691	233.5922	380	102.2	23.4738	148.9724	160.5913
662	7943	10403	7943	10403	2454	230.9639	361	102.2	23.4797	146.2467	158.3148
663	2685	5496	2685	5496	2800	240.0380	400	102.2	25.8465	150.1880	161.4727
664	10194	13022	10194	13022	2821	236.6313	423	102.2	25.5155	148.7055	160.0042
665	824	3329	824	3329	2492	233.7432	382	105.8	29.2138	149.1140	160.8948
666	2435	5096	2435	5096	2651	241.8571	383	102.2	25.7497	152.2422	163.9789
667	11341	14061	11341	14061	2712	239.9897	402	102.2	25.7805	150.2739	161.9090
668	2007	4718	2007	4718	2706	240.4206	402	102.2	25.8877	151.0295	162.5411
669	10503	13353	10503	13353	2843	238.8529	418	102.2	26.1441	149.5106	160.8025
670	9902	12344	9902	12344	2435	232.9748	351	102.2	25.5877	145.6897	157.5711
671	11630	14198	11630	14198	2561	240.8112	385	104.0	25.1146	151.2770	163.3665

Case II			Checkpoint Solution								
Sample Number	Starting Record	Ending Record	(a)_1	(a)_2	(b)	(c)	(d)	(e)	(f)	(g)_1	(g)_2
672	11157	13725	11157	13725	2562	238.2167	388	102.2	26.4208	149.9515	161.9229
673	11405	13887	11405	13887	2476	240.7442	365	102.2	25.5011	150.3375	162.4888
674	5686	8584	5686	8584	2888	232.6142	401	102.2	25.3346	148.5044	159.6819
675	2714	5239	2714	5239	2515	243.3860	353	102.2	26.1383	150.7936	162.7444
676	742	3570	742	3570	2815	231.3706	432	105.8	28.5261	147.6171	158.6393
677	7299	9768	7299	9768	2461	232.5484	348	102.2	23.1939	149.3046	161.4553
678	9758	12481	9758	12481	2716	236.1623	397	102.2	25.6349	147.7846	159.1388