р	s	Rand_Rep			Max-Rep			Lorena et al (2002)		Atta et al (2017) GA w/o Ref		Atta et al (2017) GA with Ref		
		Cov	Gap	Time	Cov	Gap	Time	Cov	Time	Cov	Time	Cov	Time	Optimal
1	800	8393	0	3.5	8393	0,000	5.1	8393	1.4	8393	4.4	8393	2.8	8393
4	800	20584	3,938772	174.2	21428	0,000	521.3	21428	43.8	21400	14.6	21428	7.7	21428
8	800	27534	0,896232	224.1	27757	0,094	984.1	27782	129.8	27744	45.6	27783	18.1	27783
12	800	28834	0,927708	217.4	29022	0,282	942.3	29102	283.9	28998	62.6	29104	20.5	29104
2	1200	20215	0,36964	144.2	20290	0,000	430.1	20290	49.1	20290	9.0	20290	5.5	20290
4	1200	26531	1,846097	139.8	26719	1,151	621.4	27030	25.9	26808	18.9	27030	8.2	27030
6	1200	28891	0,840884	142.7	28727	1,404	535.7	29136	106.6	28966	14.5	29048	7.7	29136
3	1600	27544	0,462561	135.2	27672	0,000	599.4	27672	53.9	27672	10.3	27672	5.2	27672
5	1600	29168	0	31.1	29139	0,099	315.7	29168	110.4	29168	6.1	29168	3.1	29168
	p 1 4 8 12 2 4 6 3 5	4 800 8 800 12 800 2 1200 4 1200 6 1200 3 1600	Cov 1 800 8393 4 800 20584 8 800 27534 12 800 28834 2 1200 20215 4 1200 26531 6 1200 28891 3 1600 27544	Cov Gap 1 800 8393 0 4 800 20584 3,938772 8 800 27534 0,896232 12 800 28834 0,927708 2 1200 20215 0,36964 4 1200 26531 1,846097 6 1200 28891 0,840884 3 1600 27544 0,462561	Cov Gap Time 1 800 8393 0 3.5 4 800 20584 3,938772 174.2 8 800 27534 0,896232 224.1 12 800 28834 0,927708 217.4 2 1200 20215 0,36964 144.2 4 1200 26531 1,846097 139.8 6 1200 28891 0,840884 142.7 3 1600 27544 0,462561 135.2	Cov Gap Time Cov 1 800 8393 0 3.5 8393 4 800 20584 3,938772 174.2 21428 8 800 27534 0,896232 224.1 27757 12 800 28834 0,927708 217.4 29022 2 1200 20215 0,36964 144.2 20290 4 1200 26531 1,846097 139.8 26719 6 1200 28891 0,840884 142.7 28727 3 1600 27544 0,462561 135.2 27672	Cov Gap Time Cov Gap 1 800 8393 0 3.5 8393 0,000 4 800 20584 3,938772 174.2 21428 0,000 8 800 27534 0,896232 224.1 27757 0,094 12 800 28834 0,927708 217.4 29022 0,282 2 1200 20215 0,36964 144.2 20290 0,000 4 1200 26531 1,846097 139.8 26719 1,151 6 1200 28891 0,840884 142.7 28727 1,404 3 1600 27544 0,462561 135.2 27672 0,000	Cov Gap Time Cov Gap Time 1 800 8393 0 3.5 8393 0,000 5.1 4 800 20584 3,938772 174.2 21428 0,000 521.3 8 800 27534 0,896232 224.1 27757 0,094 984.1 12 800 28834 0,927708 217.4 29022 0,282 942.3 2 1200 20215 0,36964 144.2 20290 0,000 430.1 4 1200 26531 1,846097 139.8 26719 1,151 621.4 6 1200 28891 0,840884 142.7 28727 1,404 535.7 3 1600 27544 0,462561 135.2 27672 0,000 599.4	Cov Gap Time Cov Gap Time Cov 1 800 8393 0 3.5 8393 0,000 5.1 8393 4 800 20584 3,938772 174.2 21428 0,000 521.3 21428 8 800 27534 0,896232 224.1 27757 0,094 984.1 27782 12 800 28834 0,927708 217.4 29022 0,282 942.3 29102 2 1200 20215 0,36964 144.2 20290 0,000 430.1 20290 4 1200 26531 1,846097 139.8 26719 1,151 621.4 27030 6 1200 28891 0,840884 142.7 28727 1,404 535.7 29136 3 1600 27544 0,462561 135.2 27672 0,000 599.4 27672	Cov Gap Time Cov Gap Time Cov Time 1 800 8393 0 3.5 8393 0,000 5.1 8393 1.4 4 800 20584 3,938772 174.2 21428 0,000 521.3 21428 43.8 8 800 27534 0,896232 224.1 27757 0,094 984.1 27782 129.8 12 800 28834 0,927708 217.4 29022 0,282 942.3 29102 283.9 2 1200 20215 0,36964 144.2 20290 0,000 430.1 20290 49.1 4 1200 26531 1,846097 139.8 26719 1,151 621.4 27030 25.9 6 1200 28891 0,840884 142.7 28727 1,404 535.7 29136 106.6 3 1600 27544 0,462561 135.2 27672	Cov Gap Time Cov Gap Time Cov Time Cov 1 800 8393 0 3.5 8393 0,000 5.1 8393 1.4 8393 4 800 20584 3,938772 174.2 21428 0,000 521.3 21428 43.8 21400 8 800 27534 0,896232 224.1 27757 0,094 984.1 27782 129.8 27744 12 800 28834 0,927708 217.4 29022 0,282 942.3 29102 283.9 28998 2 1200 20215 0,36964 144.2 20290 0,000 430.1 20290 49.1 20290 4 1200 26531 1,846097 139.8 26719 1,151 621.4 27030 25.9 26808 6 1200 28891 0,840884 142.7 28727 1,404 535.7 29136 106.6	Cov Gap Time Cov Gap Time Cov Time Cov Time Cov Time 1 800 8393 0 3.5 8393 0,000 5.1 8393 1.4 8393 4.4 4 800 20584 3,938772 174.2 21428 0,000 521.3 21428 43.8 21400 14.6 8 800 27534 0,896232 224.1 27757 0,094 984.1 27782 129.8 27744 45.6 12 800 28834 0,927708 217.4 29022 0,282 942.3 29102 283.9 28998 62.6 2 1200 20215 0,36964 144.2 20290 0,000 430.1 20290 49.1 20290 9.0 4 1200 26531 1,846097 139.8 26719 1,151 621.4 27030 25.9 26808 18.9 5 12	Cov Gap Time Cov Gap Time Cov Time Cov	Cov Gap Time Cov Gap Time Cov Time Cov

Table[13]. Results of dataset SJC818

SO1800									
n	р	S	Rand_Rep			Max-Rep			
			Cov	Gap	Time	Cov	Gap	Time	Optimal
1800	20	4	157477	10,0507	12784	170362	2,691	88251	175073
1800	4	4	48947	4,54953	249.3	51280	0,000	1578.2	51280

Table[14]. Results of dataset SO1800