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 Using license file /home/zijie/gurobi.lic
 Changed value of parameter timelimit to 180.0
 Prev: inf Min: 0.0 Max: inf Default: inf
 Changed value of parameter varbranch to 3
 Prev: -1 Min: -1 Max: 3 Default: -1
 Gurobi Optimizer version 9.1.1 build v9.1.1rc0 (linux64)
 Thread count: 8 physical cores, 8 logical processors, using up to 8 threads
 Optimize a model with 2305 rows, 2352 columns and 11045 nonzeros
 Model fingerprint: 0x72774eba
 Variable types: 0 continuous, 2352 integer (2304 binary)
 Coefficient statistics:
 Matrix range [1e+00, 5e+01]
 Objective range [7e+00, 1e+08]
 Bounds range [1e+00, 5e+01]
 RHS range [1e+00, 5e+01]
 Presolve removed 47 rows and 49 columns
 Presolve time: 0.01s
 Presolved: 2258 rows, 2303 columns, 10998 nonzeros
 Variable types: 0 continuous, 2303 integer (2256 binary)
 Found heuristic solution: objective 7533.00000000

Root relaxation: objective 1.655816e+03, 199 iterations, 0.00 seconds

Nodes		Current Node			Objective Bounds		Gap	Work	
Expl	Unexpl	Obj	Depth	IntInf	Incumbent	BestBd		It/Node	Time
H	0	0	1655.81560	0	61	7533.00000	1655.81560	78.0%	- 0s
	0	0	1725.46809	0	77	7533.00000	1725.46809	77.1%	- 0s
	0	0				1891.0000000	1725.46809	8.75%	- 0s
	0	0	1725.46809	0	73	1891.00000	1725.46809	8.75%	- 0s
	0	0	1737.50355	0	66	1891.00000	1737.50355	8.12%	- 0s
	0	0	1738.17021	0	60	1891.00000	1738.17021	8.08%	- 0s
	0	0	1738.17021	0	69	1891.00000	1738.17021	8.08%	- 0s
	0	0	1740.11348	0	46	1891.00000	1740.11348	7.98%	- 0s
	0	0	1740.11348	0	63	1891.00000	1740.11348	7.98%	- 0s
	0	0	1740.11348	0	71	1891.00000	1740.11348	7.98%	- 0s
	0	0	1740.11348	0	72	1891.00000	1740.11348	7.98%	- 0s
	0	0	1740.11348	0	73	1891.00000	1740.11348	7.98%	- 0s
	0	0	1740.11348	0	79	1891.00000	1740.11348	7.98%	- 0s
	0	0	1741.42222	0	76	1891.00000	1741.42222	7.91%	- 0s
	0	0	1741.42222	0	81	1891.00000	1741.42222	7.91%	- 0s
	0	0	1745.00000	0	67	1891.00000	1745.00000	7.72%	- 0s
	0	0	1745.00000	0	70	1891.00000	1745.00000	7.72%	- 0s
	0	0	1745.00000	0	85	1891.00000	1745.00000	7.72%	- 0s
	0	0	1745.00000	0	85	1891.00000	1745.00000	7.72%	- 0s
	0	0	1745.00000	0	37	1891.00000	1745.00000	7.72%	- 0s
	0	0	1745.00000	0	34	1891.00000	1745.00000	7.72%	- 0s
H	0	0	1745.00000	0	36	1891.00000	1745.00000	7.72%	- 0s
	0	0	1745.00000	0	36	1891.00000	1745.00000	7.72%	- 0s
	0	0	1745.00000	0	33	1891.00000	1745.00000	7.72%	- 0s
	0	0	1745.00000	0	33	1891.00000	1745.00000	7.72%	- 0s
	0	0				1808.0000000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	31	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	62	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	61	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	62	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	73	1808.00000	1745.00000	3.48%	- 0s
H	0	0	1745.00000	0	73	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	83	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	82	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	64	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	77	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	41	1808.00000	1745.00000	3.48%	- 0s
	0	0	1745.00000	0	27	1808.00000	1745.00000	3.48%	- 0s
	0	0				1782.0000000	1745.00000	2.08%	- 0s

0	0	1745.00000	0	32	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	49	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	18	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	73	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	45	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	59	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	63	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	67	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	74	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	57	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	57	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	31	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	19	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	24	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	32	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	19	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	31	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	31	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	31	1782.00000	1745.00000	2.08%	-	0s
0	0	1745.00000	0	31	1782.00000	1745.00000	2.08%	-	0s
0	2	1745.00000	0	31	1782.00000	1745.00000	2.08%	-	0s
H	215	94			1776.0000000	1750.01716	1.46%	10.8	1s

Cutting planes:

Learned: 8
 Gomory: 8
 Cover: 3
 Implied bound: 41
 Clique: 2
 MIR: 39
 StrongCG: 1
 Inf proof: 2
 Zero half: 3
 RLT: 19
 Relax-and-lift: 30

Explored 2408 nodes (23940 simplex iterations) in 2.09 seconds
 Thread count was 8 (of 8 available processors)

Solution count 5: 1776 1782 1808 ... 7533

Optimal solution found (tolerance 1.00e-04)

Best objective 1.776000000000e+03, best bound 1.776000000000e+03, gap 0.0000%