```
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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 cuts to 0
   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 7533.0000000

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

    Nodes    |    Current Node    |     Objective Bounds      |     Work
 Expl Unexpl |  Obj  Depth IntInf | Incumbent    BestBd   Gap | It/Node Time

     0     0 1655.81560    0   61 7533.00000 1655.81560  78.0%     -    0s
     0     0 1674.57447    0   77 7533.00000 1674.57447  77.8%     -    0s
H    0     0                     1891.0000000 1674.57447  11.4%     -    0s
     0     0 1725.44681    0   78 1891.00000 1725.44681  8.75%     -    0s
     0     0 1725.44681    0   77 1891.00000 1725.44681  8.75%     -    0s
     0     0 1725.44681    0   62 1891.00000 1725.44681  8.75%     -    0s
     0     0 1736.44681    0   60 1891.00000 1736.44681  8.17%     -    0s
     0     0 1736.44681    0   68 1891.00000 1736.44681  8.17%     -    0s
     0     0 1736.44681    0   74 1891.00000 1736.44681  8.17%     -    0s
     0     0 1736.44681    0   59 1891.00000 1736.44681  8.17%     -    0s
H    0     0                     1776.0000000 1736.44681  2.23%     -    0s
     0     0 1736.44681    0   62 1776.00000 1736.44681  2.23%     -    0s
     0     0 1736.44681    0   66 1776.00000 1736.44681  2.23%     -    0s
     0     0 1736.44681    0   65 1776.00000 1736.44681  2.23%     -    0s
     0     2 1736.44681    0   63 1776.00000 1736.44681  2.23%     -    0s

Cutting planes:
  Learned: 9

Explored 3197 nodes (20908 simplex iterations) in 0.57 seconds
Thread count was 8 (of 8 available processors)

Solution count 3: 1776 1891 7533

Optimal solution found (tolerance 1.00e-04)
Best objective 1.776000000000e+03, best bound 1.776000000000e+03, gap 0.0000%
```