<untitled> #340

MODELS
Model-01   Flashlight
Model-02   Radio
Model-03   Toy Car
Model-04   Ball Point Pen

If model-01 is disassemble in line -- 1; otherwise -- 0 = 1
If model-02 is disassemble in line -- 1; otherwise -- 0 = 0
If model-03 is disassemble in line -- 1; otherwise -- 0 = 1
If model-04 is disassemble in line -- 1; otherwise -- 0 = 0

Warning: your license will expire in 4 days

Using license file C:\gurobi903\win64\bin\gurobi.lic
Academic license - for non-commercial use only
Gurobi Optimizer version 9.0.3 build v9.0.3rc0 (win64)
Optimize a model with 76653 rows, 5803 columns and 383355 nonzeros
Model fingerprint: 0x6b50d946
Variable types: 107 continuous, 5696 integer (5696 binary)
Coefficient statistics:
  Matrix range   [1e+00, 1e+05]
  Objective range [2e-06, 1e+00]
  Bounds range   [1e+00, 1e+00]
  RHS range   [1e+00, 3e+05]
Presolve removed 60117 rows and 2038 columns
Presolve time: 2.01s
Presolved: 16536 rows, 3765 columns, 81667 nonzeros
Variable types: 98 continuous, 3667 integer (3667 binary)
Found heuristic solution: objective 3.0102640

Root relaxation: objective 2.011726e+00, 128 iterations, 0.03 seconds

| Nodes | Current Node | Objective Bounds | Work |
Expl Unexpl	Obj Depth IntInf	Incumbent BestBd Gap	It/Node Time
	0	0	3.00925	0	14	3.01026	3.00925	0.03%	-	2s
	0	0	3.00925	0	6	3.01026	3.00925	0.03%	-	2s
	0	0	3.00926	0	6	3.01026	3.00926	0.03%	-	3s
	0	0	3.00926	0	5	3.01026	3.00926	0.03%	-	3s
H	0	0				3.0092440	3.00924	0.00%	-	4s
	0	0	3.00926	0	5	3.00924	3.00924	0.00%	-	4s

Cutting planes:
  Gomory: 1
  Cover: 3
  MIR: 6
  GUB cover: 1

Explored 1 nodes (639 simplex iterations) in 4.02 seconds

<untitled> #340

Thread count was 4 (of 4 available processors)

Solution count 3: 3.00924 3.01026 3.01026

Optimal solution found (tolerance 1.00e-04)
Best objective 3.009244000000e+00, best bound 3.009244000000e+00, gap 0.0000%
<gurobi.Model MIP instance MILP Model: 76653 constrs, 5803 vars, No parameter changes>

Solution Results

Time = 10.098243236541748 second
Total number of stations opened from both sides   :   1.0
Total number of stations opened from only one side   :   2.0
Total number of stations opened   :   4.0
MODEL- m1

(m, i)	(j,s)	Processing Time	Starting Time	Ending Time
('m1', 1) :	[(1, 1)]	30	10.0	40.0
('m1', 3) :	[(3, 2)]	12	0.0	12.0
('m1', 6) :	[(3, 1)]	21	17.99999999999997	38.99999999999997
('m1', 7) :	[(3, 1)]	6	11.999999999999968	17.999999999999968
('m1', 9) :	[(2, 2)]	25	15.0	40.0
('m1', 10) :	[(3, 1)]	10	1.999999999999968	11.999999999999968

MODEL- m3

(m, i)	(j,s)	Processing Time	Starting Time	Ending Time
('m3', 1) :	[(1, 1)]	37	0.0	37.0
('m3', 4) :	[(3, 1)]	3	25.0	28.0
('m3', 13) :	[(3, 1)]	2	28.0	30.0
('m3', 33) :	[(3, 1)]	10	30.0	40.0
('m3', 49) :	[(2, 2)]	34	0.0	34.0
('m3', 74) :	[(3, 1)]	11	0.0	11.0
('m3', 96) :	[(3, 2)]	29	11.0	40.0
('m3', 97) :	[(3, 1)]	14	11.0	25.0