

concorde log file for dj2141

concorde -s99 ../dj2141.tsp

Using random seed 99

Problem Name: dj2141

Problem Type: TSP

Pubs in Daejeon, South Korea

Walking times in seconds (OSRM Open Source Routing Machine)

Number of Nodes: 2141

Explicit Lengths (CC\_MATRIXNORM)

Set initial upperbound to 220086 (from tour)

Fractional Matching: 193610.0

Initial Running Time: 0.00 (seconds)

Basis Running Time: 0.00 (seconds)

Total fractional matching time: 0.00 (seconds)

Total Time for first\_lp: 0.00 (seconds)

LP Value 1: 171434.000000 (0.15 seconds)

LP Value 2: 201064.750000 (0.36 seconds)

LP Value 3: 205052.016667 (0.60 seconds)

LP Value 4: 206748.864333 (0.90 seconds)

LP Value 5: 207700.951700 (1.29 seconds)

LP Value 6: 207878.101531 (1.99 seconds)

LP Value 7: 208053.926827 (3.49 seconds)

LP Value 8: 208187.560185 (3.94 seconds)

LP Value 9: 208277.392191 (5.90 seconds)

LP Value 10: 208421.834584 (7.63 seconds)

LP Value 11: 208585.455594 (9.76 seconds)

LP Value 12: 208690.000338 (11.41 seconds)

LP Value 13: 208711.082103 (13.05 seconds)

New lower bound: 207747.634717

LP Value 1: 208657.500000 (13.51 seconds)

LP Value 2: 208725.467338 (14.90 seconds)

LP Value 3: 208753.404906 (16.52 seconds)

LP Value 4: 208784.500000 (18.09 seconds)

LP Value 5: 208805.882362 (20.37 seconds)

LP Value 6: 208818.923566 (21.57 seconds)

LP Value 7: 208827.779125 (23.90 seconds)

New lower bound: 208827.473967

New upperbound from x-heuristic: 213608.00

Final lower bound 208827.473967, upper bound 213608.000000

Optimize the rebuilt LP ...

New LP Val: 208827.473967

Exact lower bound: 208827.473967

DIFF: 0.000000

Optimize the rebuilt LP ...

New LP Val: 208827.473967

Re-Exact lower bound: 208827.473967  
Time for Total: 24.85 seconds (24.85 total in 1 calls)  
Final LP has 3301 rows, 8916 columns, 54521 nonzeros  
LOWER BOUND: 208827.473967 ACTIVE NODES: 1

Task 0: Branching on node 0  
BBnode 0 split into 1 (208835.91) 2 (208943.00) (1.12 seconds)  
LOWER BOUND: 208835.905000 ACTIVE NODES: 2

Task 1: Cutting on node 1  
New upperbound from x-heuristic: 211383.00  
TOUR FOUND - upperbound is 211383.00  
BBnode 1 (now 3) done cutting: lowerbound 208973.87 (11.48 seconds)  
LOWER BOUND: 208943.000000 ACTIVE NODES: 2

Task 2: Cutting on node 2  
BBnode 2 (now 4) done cutting: lowerbound 209042.56 (2.93 seconds)  
LOWER BOUND: 208973.865225 ACTIVE NODES: 2

Task 3: Branching on node 3  
BBnode 3 split into 5 (209043.33) 6 (208980.53) (1.07 seconds)  
LOWER BOUND: 208980.527689 ACTIVE NODES: 3

Task 4: Cutting on node 6  
BBnode 6 (now 7) done cutting: lowerbound 209024.69 (3.67 seconds)  
LOWER BOUND: 209024.694444 ACTIVE NODES: 3

Task 5: Branching on node 7  
BBnode 7 split into 8 (209041.08) 9 (209024.69) (0.79 seconds)  
LOWER BOUND: 209024.694444 ACTIVE NODES: 4

Task 6: Cutting on node 9  
New upperbound from x-heuristic: 209056.00  
TOUR FOUND - upperbound is 209056.00  
BBnode 9 (now 10) done cutting: lowerbound 209025.59 (1.47 seconds)  
LOWER BOUND: 209025.590333 ACTIVE NODES: 4

Task 7: Branching on node 10  
BBnode 10 split into 11 (209043.77) 12 (209035.39) (0.89 seconds)  
LOWER BOUND: 209035.385499 ACTIVE NODES: 5

Task 8: Cutting on node 12  
New upperbound from x-heuristic: 209055.00  
TOUR FOUND - upperbound is 209055.00  
BBnode 12 (now 13) can be pruned: upperbound 209055.00 (10.82 seconds)  
LOWER BOUND: 209041.083333 ACTIVE NODES: 4

Task 9: Cutting on node 8

BBnode 8 (now 14) can be pruned: upperbound 209055.00 (1.14 seconds)

LOWER BOUND: 209042.564709 ACTIVE NODES: 3

Task 10: Branching on node 4

BBnode 4 split into 15 (209080.75X) 16 (209043.06) (0.98 seconds)

Child 0 is pruned

LOWER BOUND: 209043.064709 ACTIVE NODES: 3

Task 11: Cutting on node 16

BBnode 16 (now 17) can be pruned: upperbound 209055.00 (0.79 seconds)

LOWER BOUND: 209043.333333 ACTIVE NODES: 2

Task 12: Cutting on node 5

BBnode 5 (now 18) can be pruned: upperbound 209055.00 (1.35 seconds)

LOWER BOUND: 209043.770998 ACTIVE NODES: 1

Task 13: Cutting on node 11

Writing Pool: 5688 cuts

BBnode 11 (now 19) can be pruned: upperbound 209055.00 (1.82 seconds)

Task 14: Exit

Optimal Solution: 209055.00

Number of bbnodes: 11

Total Running Time: 66.76 (seconds) Branching Time: 40.32 (seconds)