1 D:\Python\Python\setroute\python.exe "D:\Python\Pycharm\setroute\PyCharm Community Edition 2021.2.3\plugins\python-ce\helpers\pydev\pydevconsole.py" --mode=client --port=35138

2

3 import sys; print('Python %s on %s' % (sys.version, sys.platform))

4 sys.path.extend(['E:\\1 □□□□\\3 □□□□□\\1 □□□□□□□\\1 □□□□□□□□□\\1_□□□□□□_□□□□\\1_LW_□□□□1\\4 □□□□□\\3 python_code\\9 Code for this paper', 'E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□□/1_□□□□□□_□□□□/1_LW_□□□□1/4 □□□□□/3 python_code/9 Code for this paper'])

5

6 PyDev console: starting.

7

8 Python 3.9.7 (tags/v3.9.7:1016ef3, Aug 30 2021, 20:19:38) [MSC v.1929 64 bit (AMD64)] on win32

9 >>> runfile('E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□□/1_□□□□□□_□□□□/1_LW_□□□□1/4 □□□□□/3 python_code/9 Code for this paper/main_RO_CCG.py', wdir='E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□□/1_□□□□□□_□□□□/1_LW_□□□□1/4 □□□□□/3 python_code/9 Code for this paper')

10 Backend TkAgg is interactive backend. Turning interactive mode on.

11 Waiting 5s......

12

13 Optimize the ./R_12_5.xlsx instance by CCG

14

15   Master protblem status = 2 , is Optimal and MP obj = 499.0

16 The initial lb = -inf   ub = inf

17

18 The current iteration cnt = 0

19   The SP model was solved Optimal 2 and SPObj = 499.0

20   Master protblem status = 2 , is Optimal

21   Deterministic Sub problem Status= 2 , is Optimal

22   lb = 916.0   ub = 916.0

23   MPObj = 916.0   MP_delete_Hua_Obj = 524.0   Hua = 392.0   SPObj = 499.0   Deter_SP_Obj = 392.0

24

25 ub - lb = 0.0

26

27 Iteration cycle stopped by termination criterion 1: Because ub - lb <= eps, the iteration stop, and cnt = 0

28   i: 0.0 l_i: 5.0   p_i: 10.0   al_i: 1.0   sol_a_i: 1.0   sol_g_i: 0.0   d_i: 25.0   sol_taoi: 1.0   sol_deltai: 32.0 sol_deltai - sol_taoi: 31.0 sol_taoP: 1.0   sol_deltaP: 7.0 sol_deltaP - sol_taoP: 6.0 cI_i: 8165121.0   sol_c_i: 8165121.0   sol_gp_i: 0.0 total work: 8172964.0   wasted work: 0.029748448665624858

29   i: 1.0 l_i: 7.0   p_i: 15.0   al_i: 7.0   sol_a_i: 7.0   sol_g_i: 0.0   d_i: 21.0   sol_taoi: 7.0   sol_deltai: 21.0 sol_deltai - sol_taoi: 14.0 sol_taoP: 7.0   sol_deltaP: 10.0   sol_deltaP - sol_taoP: 3.0 cI_i: 3555101.0   sol_c_i: 3555101.0   sol_gp_i: 0.0 total work: 3559194.0   wasted work: 0.015524722732169137

30   i: 2.0 l_i: 6.0   p_i: 28.0   al_i: 7.0   sol_a_i: 7.0   sol_g_i: 0.0   d_i: 11.0   sol_taoi: 7.0   sol_deltai: 11.0 sol_deltai - sol_taoi: 4.0   sol_taoP: 7.0   sol_deltaP: 8.0 sol_deltaP - sol_taoP: 1.0 cI_i: 1040864.0   sol_c_i: 1040864.0   sol_gp_i: 0.0 total work: 1318220.0   wasted work: 1.0520095279998787

31   i: 3.0 l_i: 6.0   p_i: 22.0   al_i: 15.0   sol_a_i: 15.0 sol_g_i: 0.0   d_i: 25.0   sol_taoi: 15.0   sol_deltai: 26.0 sol_deltai - sol_taoi: 11.0 sol_taoP: 15.0 sol_deltaP: 17.0   sol_deltaP - sol_taoP: 2.0 cI_i: 2720048.0   sol_c_i: 2720048.0   sol_gp_i: 0.0 total work: 2768262.0   wasted work: 0.18287539257483576

32   i: 4.0 l_i: 5.0   p_i: 28.0   al_i: 23.0   sol_a_i: 23.0 sol_g_i: 0.0   d_i: 40.0   sol_taoi: 23.0   sol_deltai: 42.0 sol_deltai - sol_taoi: 19.0 sol_taoP: 23.0 sol_deltaP: 27.0   sol_deltaP - sol_taoP: 4.0 cI_i: 5002583.0   sol_c_i: 5002583.0   sol_gp_i: 0.0 total work: 5272880.0   wasted work: 1.0252347863027416

33   i: 5.0 l_i: 5.0   p_i: 15.0   al_i: 26.0   sol_a_i: 26.0 sol_g_i: 0.0   d_i: 32.0   sol_taoi: 26.0   sol_deltai: 31.0 sol_deltai - sol_taoi: 5.0   sol_taoP: 26.0 sol_deltaP: 28.0   sol_deltaP - sol_taoP: 2.0 cI_i: 1259467.0   sol_c_i: 1259467.0   sol_gp_i: 0.0 total work: 1450042.0   wasted work: 0.7228497519382198

34   i: 6.0 l_i: 7.0   p_i: 14.0   al_i: 35.0   sol_a_i: 38.0 sol_g_i: 0.6   d_i: 46.0   sol_taoi: 38.0   sol_deltai: 47.0 sol_deltai - sol_taoi: 9.0   sol_taoP: 38.0 sol_deltaP: 40.0   sol_deltaP - sol_taoP: 2.0 cI_i: 2258618.0   sol_c_i: 2372796.0   sol_gp_i: 0.07217940353911588 total work: 2372796.0   wasted work: 0.0

35   i: 7.0 l_i: 6.0   p_i: 21.0   al_i: 36.0   sol_a_i: 36.0 sol_g_i: 0.0   d_i: 55.0   sol_taoi: 36.0   sol_deltai: 50.0 sol_deltai - sol_taoi: 14.0 sol_taoP: 36.0 sol_deltaP: 39.0   sol_deltaP - sol_taoP: 3.0 cI_i: 3584322.0   sol_c_i: 4638898.0   sol_gp_i: 1.0 total work: 4745592.0   wasted work: 0.4046896572650999

36   i: 8.0 l_i: 7.0   p_i: 7.0 al_i: 39.0   sol_a_i: 43.0 sol_g_i: 0.4   d_i: 75.0   sol_taoi: 43.0   sol_deltai: 62.0 sol_deltai - sol_taoi: 19.0 sol_taoP: 43.0 sol_deltaP: 47.0   sol_deltaP - sol_taoP: 4.0 cI_i: 4975568.0   sol_c_i: 5233764.933333245   sol_gp_i: 0.2448348277727208   total work: 5272880.0   wasted work: 0.14836319683647226

37   i: 9.0 l_i: 5.0   p_i: 14.0   al_i: 43.0   sol_a_i: 50.0 sol_g_i: 1.0   d_i: 70.0   sol_taoi: 50.0   sol_deltai: 65.0 sol_deltai - sol_taoi: 15.0 sol_taoP: 50.0 sol_deltaP: 55.0   sol_deltaP - sol_taoP: 5.0 cI_i: 3811906.0   sol_c_i: 5657414.0   sol_gp_i: 1.0 total work: 5800168.0   wasted work: 0.5414650058412102

38   i: 10.0   l_i: 6.0   p_i: 24.0   al_i: 47.0   sol_a_i: 52.0 sol_g_i: 0.7142857142857143 d_i: 67.0   sol_taoi: 52.0   sol_deltai: 62.0 sol_deltai - sol_taoi: 10.0 sol_taoP: 52.0 sol_deltaP: 54.0   sol_deltaP - sol_taoP: 2.0 cI_i: 2487225.0   sol_c_i: 2636440.0   sol_gp_i: 0.28298576868807945   total work: 2636440.0   wasted work: 0.0

39   i: 11.0   l_i: 5.0   p_i: 19.0   al_i: 50.0   sol_a_i: 55.31428571428572   sol_g_i: 0.8857142857142857   d_i: 82.0   sol_taoi: 56.0   sol_deltai: 75.0   sol_deltai - sol_taoi: 19.0 sol_taoP: 56.0   sol_deltaP: 60.0   sol_deltaP - sol_taoP: 4.0 cI_i: 5002583.0   sol_c_i: 6320803.0   sol_gp_i: 1.0   total work: 6327456.0   wasted work: 0.025234786302741577

40 Time: 133.000000

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