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=35215

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_13_2.xlsx  instance by CCG

14

15      Master protblem status =  2 , is Optimal and MP obj =  506.0

16  The initial lb =  -inf       ub =  inf

17

18  The current iteration cnt =  0

19      The SP model was solved Optimal 2 and SPObj =  506.0

20      Master protblem status =  2 , is Optimal

21      Deterministic Sub problem Status=  2 , is Optimal

22      lb =  932.0                ub =  932.0

23       MPObj =  932.0     MP_delete_Hua_Obj =  530.0        Hua =  402.0       SPObj =  506.0       Deter_SP_Obj =  402.0

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: 9.0  al_i: 4.0       sol_a_i: 4.0   sol_g_i: 0.0   d_i: 11.0   sol_taoi: 4.0   sol_deltai: 13.0  sol_deltai - sol_taoi: 9.0    sol_taoP: 4.0   sol_deltaP: 8.0  sol_deltaP - sol_taoP: 4.0  cl_i: 2189946.0    sol_c_i: 2189946.0   sol_gp_i: 0.0  total work: 2240974.0   wasted work: 0.19354887651530095

29      i: 1.0  l_i: 6.0   p_i: 28.0   al_i: 5.0       sol_a_i: 5.0   sol_g_i: 0.0   d_i: 32.0    sol_taoi: 5.0   sol_deltai: 35.0  sol_deltai - sol_taoi: 30.0  sol_taoP: 5.0   sol_deltaP: 11.0    sol_deltaP - sol_taoP: 6.0  cl_i: 7890144.0    sol_c_i: 7890144.0   sol_gp_i: 0.0  total work: 7909320.0   wasted work: 0.07273444493331917

30      i: 2.0  l_i: 6.0   p_i: 22.0   al_i: 9.0       sol_a_i: 9.0   sol_g_i: 0.0   d_i: 21.0    sol_taoi: 9.0   sol_deltai: 23.0  sol_deltai - sol_taoi: 14.0  sol_taoP: 9.0   sol_deltaP: 12.0    sol_deltaP - sol_taoP: 3.0  cl_i: 3498038.0    sol_c_i: 3498038.0   sol_gp_i: 0.0  total work: 3691016.0   wasted work: 0.7319643155163782

31      i: 3.0  l_i: 5.0   p_i: 17.0   al_i: 16.0      sol_a_i: 16.0  sol_g_i: 0.0   d_i: 18.0   sol_taoi: 16.0   sol_deltai: 21.0  sol_deltai - sol_taoi: 5.0   sol_taoP: 16.0  sol_deltaP: 18.0    sol_deltaP - sol_taoP: 2.0  cl_i: 1182426.0    sol_c_i: 1182426.0   sol_gp_i: 0.0  total work: 1581864.0   wasted work: 1.5150657705087163

32      i: 4.0  l_i: 7.0   p_i: -0.0   al_i: 20.0      sol_a_i: 20.0  sol_g_i: 0.0   d_i: 29.0   sol_taoi: 20.0   sol_deltai: 26.0  sol_deltai - sol_taoi: 6.0   sol_taoP: 20.0  sol_deltaP: 22.0    sol_deltaP - sol_taoP: 2.0  cl_i: 1340412.0    sol_c_i: 1340412.0   sol_gp_i: 0.0  total work: 1581864.0   wasted work: 0.9158258864226002

33      i: 5.0  l_i: 6.0   p_i: 8.0  al_i: 20.0       sol_a_i: 20.0  sol_g_i: 0.0   d_i: 35.0    sol_taoi: 20.0   sol_deltai: 34.0  sol_deltai - sol_taoi: 14.0  sol_taoP: 20.0  sol_deltaP: 23.0    sol_deltaP - sol_taoP: 3.0  cl_i: 3537538.0    sol_c_i: 3537538.0   sol_gp_i: 0.0  total work: 3559194.0   wasted work: 0.08214106901731122

34      i: 6.0  l_i: 5.0   p_i: 17.0   al_i: 23.0      sol_a_i: 23.0  sol_g_i: 0.0   d_i: 28.0   sol_taoi: 23.0   sol_deltai: 27.0  sol_deltai - sol_taoi: 4.0   sol_taoP: 23.0  sol_deltaP: 25.0    sol_deltaP - sol_taoP: 2.0  cl_i: 1001282.0    sol_c_i: 1001282.0   sol_gp_i: 0.0  total work: 1450042.0   wasted work: 1.7021437999726905

35      i: 7.0  l_i: 5.0   p_i: 23.0   al_i: 27.0      sol_a_i: 31.0  sol_g_i: 0.8   d_i: 37.0    sol_taoi: 31.0   sol_deltai: 40.0  sol_deltai - sol_taoi: 9.0   sol_taoP: 31.0  sol_deltaP: 34.0    sol_deltaP - sol_taoP: 3.0  cl_i: 2280832.0    sol_c_i: 2504618.0   sol_gp_i: 0.14146981029974764  total work: 2768262.0   wasted work: 1.0

36      i: 8.0  l_i: 7.0   p_i: 16.0   al_i: 29.0      sol_a_i: 32.0  sol_g_i: 0.375   d_i: 37.0   sol_taoi: 32.0   sol_deltai: 37.0  sol_deltai - sol_taoi: 5.0   sol_taoP: 32.0  sol_deltaP: 34.0    sol_deltaP - sol_taoP: 2.0  cl_i: 1257841.0    sol_c_i: 1845508.0   sol_gp_i: 0.5572542898757415   total work: 2109152.0   wasted work: 1.0

37      i: 9.0  l_i: 6.0   p_i: 19.0   al_i: 41.0      sol_a_i: 42.0  sol_g_i: 0.1   d_i: 73.0   sol_taoi: 42.0   sol_deltai: 71.0  sol_deltai - sol_taoi: 29.0  sol_taoP: 42.0  sol_deltaP: 48.0    sol_deltaP - sol_taoP: 6.0  cl_i: 7475471.0    sol_c_i: 8436608.0   sol_gp_i: 0.9113966181669221   total work: 8568430.0   wasted work: 0.5

38      i: 10.0   l_i: 7.0   p_i: 25.0   al_i: 42.0      sol_a_i: 49.0  sol_g_i: 1.0   d_i: 57.0   sol_taoi: 49.0   sol_deltai: 63.0  sol_deltai - sol_taoi: 14.0  sol_taoP: 49.0  sol_deltaP: 52.0    sol_deltaP - sol_taoP: 3.0  cl_i: 3432678.0    sol_c_i: 3691016.0   sol_gp_i: 0.13998205372179368  total work: 3954660.0   wasted work: 1.0

39      i: 11.0   l_i: 6.0   p_i: 8.0  al_i: 48.0      sol_a_i: 51.0  sol_g_i: 0.42857142857142855   d_i: 57.0   sol_taoi: 51.0   sol_deltai: 61.0  sol_deltai - sol_taoi: 10.0  sol_taoP: 51.0  sol_deltaP: 54.0    sol_deltaP - sol_taoP: 3.0  cl_i: 2477129.0    sol_c_i: 2925269.6095238095  sol_gp_i: 0.849897227935795   total work: 3031906.0   wasted work: 0.40447114471101364

40      i: 12.0   l_i: 5.0   p_i: 14.0   al_i: 50.0      sol_a_i: 55.378571428571426  sol_g_i: 0.8964285714285705  d_i: 76.0   sol_taoi: 56.0   sol_deltai: 79.0  sol_deltai - sol_taoi: 23.0  sol_taoP: 56.0  sol_deltaP: 61.0    sol_deltaP - sol_taoP: 5.0  cl_i: 6063361.0    sol_c_i: 7381581.0   sol_gp_i: 1.0  total work: 7382032.0   wasted work: 0.0017106401055969414

41  Time: 152.000000

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