```
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=52068
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_ECCG_deterministic.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_9_4.xlsx instance by ECCG for deterministic model
14
15  Set parameter MIPGap to value 0.01
16        Master protblem status = 2 , is Optimal and MP obj = 412.0
17  The initial lb = -inf      ub = inf
18
19  The current iteration cnt = 0
20        The SP model was solved Optimal 2 and SPObj = 412.0
21        Deterministic Sub problem Status= 2 , is Optimal
22        Master protblem status = 2 , is Optimal
23        lb = 720.0            ub = 720.0
24         MPObj = 720.0    MP_delete_Hua_Obj = 412.0    Hua = 308.0    SPObj = 412.0    MP_SP_Obj = 308.0    Deter_SP_Obj = 308.0
25
26  ub - lb = 0.0
27
28  Iteration cycle stopped by termination criterion 1: Because ub - lb <= eps, the iteration stop, and cnt = 0
29     i: 0.0  l_i: 6.0   p_i: 7.0  al_i: 54.0     sol_a_i: 54.0 sol_g_i: 0.0   d_i: 70.0   sol_taoi: 54.0   sol_deltai: 70.0 sol_deltai - sol_taoi: 16.0  sol_taoP:
    54.0   sol_deltaP: 58.0   sol_deltaP - sol_taoP: 4.0  cI_i: 4202886.0   sol_c_i: 4202886.0  sol_gp_i: 0.0  total work: 5272880.0  wasted work: 4.
    0584803750512055
30     i: 1.0  l_i: 6.0   p_i: 23.0  al_i: 31.0     sol_a_i: 31.0 sol_g_i: 0.0   d_i: 46.0   sol_taoi: 31.0   sol_deltai: 46.0 sol_deltai - sol_taoi: 15.0  sol_taoP
    : 31.0   sol_deltaP: 34.0   sol_deltaP - sol_taoP: 3.0  cI_i: 3814820.0   sol_c_i: 3814820.0  sol_gp_i: 0.0  total work: 3822838.0  wasted work: 0.
    03041222254251946
31     i: 2.0  l_i: 6.0   p_i: 7.0  al_i: 30.0     sol_a_i: 30.0 sol_g_i: 0.0   d_i: 49.0   sol_taoi: 30.0   sol_deltai: 49.0 sol_deltai - sol_taoi: 19.0  sol_taoP:
    30.0   sol_deltaP: 37.0   sol_deltaP - sol_taoP: 7.0  cI_i: 4748430.0   sol_c_i: 4748430.0  sol_gp_i: 0.0  total work: 4877414.0  wasted work: 0.
    4892354842135607
32     i: 3.0  l_i: 5.0   p_i: 0.0  al_i: 3.0     sol_a_i: 3.0  sol_g_i: 0.0   d_i: 13.0   sol_taoi: 3.0  sol_deltai: 13.0 sol_deltai - sol_taoi: 10.0  sol_taoP: 3.0
    sol_deltaP: 7.0   sol_deltaP - sol_taoP: 4.0  cI_i: 2457040.0   sol_c_i: 2457040.0  sol_gp_i: 0.0  total work: 2636440.0  wasted work: 0.
    6804630486565216
33     i: 4.0  l_i: 6.0   p_i: 17.0  al_i: 28.0     sol_a_i: 28.0 sol_g_i: 0.0   d_i: 36.0   sol_taoi: 28.0   sol_deltai: 36.0 sol_deltai - sol_taoi: 8.0   sol_taoP
    : 28.0   sol_deltaP: 30.0   sol_deltaP - sol_taoP: 2.0  cI_i: 2051977.0   sol_c_i: 2051977.0  sol_gp_i: 0.0  total work: 2636440.0  wasted work: 2.
    2168644080654216
34     i: 5.0  l_i: 6.0   p_i: 5.0  al_i: 5.0     sol_a_i: 5.0  sol_g_i: 0.0   d_i: 19.0   sol_taoi: 5.0  sol_deltai: 18.0 sol_deltai - sol_taoi: 13.0  sol_taoP: 5.0
    sol_deltaP: 10.0    sol_deltaP - sol_taoP: 5.0  cI_i: 3343960.0   sol_c_i: 3343960.0  sol_gp_i: 0.0  total work: 3427372.0  wasted work: 0.
    3163811806830423
35     i: 6.0  l_i: 6.0   p_i: 13.0   al_i: 65.0     sol_a_i: 65.0 sol_g_i: 0.0   d_i: 83.0   sol_taoi: 65.0   sol_deltai: 78.0 sol_deltai - sol_taoi: 13.0  sol_taoP
    : 65.0  sol_deltaP: 68.0   sol_deltaP - sol_taoP: 3.0  cI_i: 3237418.0   sol_c_i: 3237418.0  sol_gp_i: 0.0  total work: 4481948.0  wasted work: 4.
    7204943029236395
36     i: 7.0  l_i: 6.0   p_i: 0.0  al_i: 31.0     sol_a_i: 31.0 sol_g_i: 0.0   d_i: 63.0   sol_taoi: 31.0   sol_deltai: 57.0 sol_deltai - sol_taoi: 26.0  sol_taoP:
    31.0   sol_deltaP: 39.0   sol_deltaP - sol_taoP: 8.0  cI_i: 6664913.0   sol_c_i: 6664913.0  sol_gp_i: 0.0  total work: 6854744.0  wasted work: 0.
    7200277647130221
37     i: 8.0  l_i: 4.0   p_i: 13.0   al_i: 20.0     sol_a_i: 20.0 sol_g_i: 0.0   d_i: 48.0   sol_taoi: 20.0   sol_deltai: 45.0 sol_deltai - sol_taoi: 25.0  sol_taoP
    : 20.0   sol_deltaP: 25.0   sol_deltaP - sol_taoP: 5.0  cI_i: 6574605.0   sol_c_i: 6574605.0  sol_gp_i: 0.0  total work: 6591100.0  wasted work: 0.
    0625654291392939
38  Time: 58.000000
39
40
41
42
```