```
 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=6257
 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_5_3.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 = 240.0
17  The initial lb = -inf      ub = inf
18
19  The current iteration cnt = 0
20      The SP model was solved Optimal 2 and SPObj = 240.0
21      Deterministic Sub problem Status= 2 , is Optimal
22      Master protblem status = 2 , is Optimal
23      lb = 416.0              ub = 416.0
24       MPObj = 416.0     MP_delete_Hua_Obj = 240.0      Hua = 176.0      SPObj = 240.0      MP_SP_Obj = 176.0       Deter_SP_Obj = 176.0
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: 7.0   p_i: 5.0  al_i: 42.0      sol_a_i: 42.0  sol_g_i: 0.0   d_i: 66.0   sol_taoi: 42.0    sol_deltai: 64.0  sol_deltai - sol_taoi: 22.0  sol_taoP:
    42.0   sol_deltaP: 47.0    sol_deltaP - sol_taoP: 5.0  cl_i: 5626287.0    sol_c_i: 5626287.0   sol_gp_i: 0.0  total work: 6195634.0   wasted work: 2.
    159529517076057
30      i: 1.0  l_i: 7.0   p_i: 0.0  al_i: 7.0       sol_a_i: 7.0   sol_g_i: 0.0   d_i: 25.0   sol_taoi: 7.0   sol_deltai: 23.0  sol_deltai - sol_taoi: 16.0  sol_taoP: 7.0
    sol_deltaP: 11.0    sol_deltaP - sol_taoP: 4.0  cl_i: 4082459.0    sol_c_i: 4082459.0   sol_gp_i: 0.0  total work: 4218304.0   wasted work: 0.
    5152592131814113
31      i: 2.0  l_i: 5.0   p_i: 7.0  al_i: 21.0      sol_a_i: 21.0  sol_g_i: 0.0   d_i: 36.0   sol_taoi: 21.0    sol_deltai: 34.0  sol_deltai - sol_taoi: 13.0  sol_taoP:
    21.0    sol_deltaP: 24.0    sol_deltaP - sol_taoP: 3.0  cl_i: 3410436.0    sol_c_i: 3410436.0   sol_gp_i: 0.0  total work: 3559194.0   wasted work: 0.
    5642381393090683
32      i: 3.0  l_i: 5.0   p_i: 0.0  al_i: 34.0      sol_a_i: 34.0  sol_g_i: 0.0   d_i: 52.0   sol_taoi: 35.0    sol_deltai: 51.0  sol_deltai - sol_taoi: 16.0  sol_taoP:
    35.0    sol_deltaP: 43.0    sol_deltaP - sol_taoP: 8.0  cl_i: 4072402.0    sol_c_i: 4072402.0   sol_gp_i: 0.0  total work: 4218304.0   wasted work: 0.
    5534053496381484
33      i: 4.0  l_i: 7.0   p_i: 12.0   al_i: 48.0      sol_a_i: 48.0  sol_g_i: 0.0   d_i: 73.0   sol_taoi: 48.0    sol_deltai: 68.0  sol_deltai - sol_taoi: 20.0  sol_taoP
    : 48.0   sol_deltaP: 51.0    sol_deltaP - sol_taoP: 3.0  cl_i: 5098786.0    sol_c_i: 5098786.0   sol_gp_i: 0.0  total work: 5536524.0   wasted work: 1.
    6603374247090774
34  Time: 19.000000
35
36
37
38
```