```
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=5379
 2
3
   import sys; print('Python %s on %s' % (sys.version, sys.platform))
   6
   PyDev console: starting.
8 Python 3.9.7 (tags/v3.9.7:1016ef3, Aug 30 2021, 20:19:38) [MSC v.1929 64 bit (AMD64)] on win32
   main_ECCG_deterministic.py', wdir='E:/1 0000/3 00000/1 0000000/1 0000000/1 000000/1 LW_00001/4 0000/3 python_code/
10 Backend TkAgg is interactive backend. Turning interactive mode on.
11
   Waiting 5s.....
   Optimize the ./R 6 4.xlsx instance by ECCG for deterministic model
13
14
15
   Set parameter MIPGap to value 0.01
        Master protblem status = 2, is Optimal and MP obj = 321.0
16
   The initial lb = -inf
                        ub = inf
17
18
19
   The current iteration cnt = 0
20
        The SP model was solved Optimal 2 and SPObj = 321.0
        Deterministic Sub problem Status= 2, is Optimal
21
22
        Master protblem status = 2, is Optimal
        1b = 584.0
                             ub = 584.0
        MPObj = 584.0
                        MP_delete_Hua_Obj = 321.0
24
                                                       Hua = 263.0
                                                                      SPObi = 321.0
                                                                                     MP SP Obj = 263.0
                                                                                                               Deter SP Obj = 263.0
25
26
   ub - 1b = 0.0
27
28 Iteration cycle stopped by termination criterion 1: Because ub - lb \le eps, the iteration stop, and cnt = 0
29
      i: 0.0 1_i: 5.0 p_i: 29.0 aI_i: 44.0
                                            sol\_a\_i: \ 44.0 \quad sol\_g\_i: \ 0.0 \quad d\_i: \ 61.0 \quad sol\_taoi: \ 44.0 \quad sol\_deltai: \ 59.0 \quad sol\_deltai - sol\_taoi: \ 15.0 \quad sol\_taoP
     44.0 sol_deltaP: 47.0 sol_deltaP - sol_taoP: 3.0 cl_i: 3837138.0 sol_c_i: 3837138.0 sol_gp_i: 0.0 total work: 3954660.0 wasted work: 0.
   44576019177375553
                                          sol_a_i: 58.0 sol_g_i: 0.0 d_i: 68.0 sol_taoi: 58.0 sol_deltai: 66.0 sol_deltai - sol_taoi: 8.0 sol_taoP
      i: 1.0 1_i: 7.0 p_i: 22.0 aI_i: 58.0
30
                                                                   sol_c_i: 2083988.0 sol_gp_i: 0.0 total work: 2109152.0 wasted work: 0.
     58.0 sol deltaP: 59.0 sol deltaP - sol taoP: 1.0 cI i: 2083988.0
   09544689050386126
                                          sol_a_i: 58.0 sol_g_i: 0.0 d_i: 76.0 sol_taoi: 58.0 sol_deltai: 74.0 sol deltai - sol taoi: 16.0 sol taoP:
     i: 2.0 1_i: 4.0 p_i: 7.0 aI_i: 58.0
   59.0 sol_deltaP: 67.0 sol_deltaP - sol_taoP: 8.0 cI_i: 4006263.0
                                                                    sol_c_i: 4006263.0 sol_gp_i: 0.0 total work: 4218304.0 wasted work: 0.
   8042701521749025
     i: 3.0 l_i: 7.0 p_i: 0.0 al_i: 16.0 sol_a_i: 16.0 sol_g_i: 0.0 i.0 sol_deltaP: 21.0 sol_deltaP - sol_taoP: 5.0 cl_i: 2408241.0
32
                                          sol a i: 16.0 sol g i: 0.0 d i: 28.0 sol taoi: 16.0 sol deltai: 26.0 sol deltai - sol taoi: 10.0 sol taoP:
                                                                    sol_c_i: 2408241.0 sol_gp_i: 0.0 total work: 2636440.0 wasted work: 0.
   8655573424769766
                                          sol a i: 40.0 sol g i: 0.0 d i: 71.0 sol taoi: 40.0 sol deltai: 68.0 sol deltai - sol taoi: 28.0 sol taoP:
      i: 4.0 1_i: 7.0 p_i: 0.0 aI_i: 40.0
         sol deltaP: 47.0 sol deltaP - sol_taoP: 7.0 cI_i: 7232415.0 sol_c_i: 7232415.0 sol_gp_i: 0.0 total work: 7382032.0 wasted work: 0.
   40.0
   5674963207962253
      i: 5.0 1_i: 7.0 p_i: 27.0 aI_i: 20.0
                                            sol_a_i: 20.0 sol_g_i: 0.0 d_i: 38.0 sol_taoi: 20.0 sol_deltai: 28.0 sol_deltai - sol_taoi: 8.0 sol_taoP
     20.0 sol_deltaP: 22.0 sol_deltaP - sol_taoP: 2.0 cl_i: 1961561.0 sol_c_i: 1961561.0 sol_gp_i: 0.0 total work: 2240974.0 wasted work: 1.
   059811715798577
   Time: 22.000000
37
38
39
```