```
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=51857
  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 9 3.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 = 491.0
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 = 491.0
               Deterministic Sub problem Status= 2, is Optimal
21
22
               Master protblem status = 2, is Optimal
               1b = 891.0
                                                         ub = 891.0
                MPObj = 891.0 MP_delete_Hua_Obj = 491.0
24
                                                                                                            Hua = 400.0
                                                                                                                                          SPObi = 491.0
                                                                                                                                                                        MP SP Obi = 400.0
                                                                                                                                                                                                                          Deter SP Obj = 400.0
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: 58.0
                                                                                        sol\_a\_i: 58.0 \quad sol\_g\_i: 0.0 \quad d\_i: 69.0 \quad sol\_taoi: 58.0 \quad sol\_deltai: 69.0 \quad sol\_deltai - sol\_taoi: 11.0 \quad sol\_taoP
          58.0 sol_deltaP: 61.0 sol_deltaP - sol_taoP: 3.0 cI_i: 2829686.0 sol_c_i: 2829686.0 sol_gp_i: 0.0 total work: 3163728.0 wasted work: 1.
       2670191622035776
            i: 1.0 1_i: 5.0 p_i: 29.0 aI_i: 23.0
                                                                                    sol_a_i: 23.0 sol_g_i: 0.0 d_i: 32.0 sol_taoi: 23.0 sol_deltai: 32.0 sol_deltai - sol_taoi: 9.0 sol_taoP
30
          23.0 sol deltaP: 25.0 sol deltaP - sol taoP: 2.0 cI i: 2132972.0
                                                                                                                                     sol c i: 2132972.0 sol gp i: 0.0 total work: 2636440.0 wasted work: 1.
       9096508928706892
          i: 2.0 l_i: 4.0 p_i: 21.0 al_i: 30.0 sol_a_i: 30.0 sol_g_i: 0.0 d_i: 54.0 sol_taoi: 30.0 sol_deltai: 54.0 so
                                                                                        sol_a_i: 30.0 sol_g_i: 0.0 d_i: 54.0 sol_taoi: 30.0 sol_deltai: 54.0 sol_deltai - sol_taoi: 24.0 sol_taoP
       5734968366433524
          i: 3.0 l_i: 5.0 p_i: 16.0 al_i: 60.0 sol_a_i: 60.0 sol_g_i: 0.0 d_i: 69.0 sol_taoi: 60.0 sol_deltai: 69.0 sol_deltai - sol_taoi: 9.0 sol
                                                                                       sol a i: 60.0 sol g i: 0.0 d i: 69.0 sol taoi: 60.0 sol deltai: 69.0 sol deltai - sol taoi: 9.0 sol taoP
       9194292303257423
                                                                                       sol a i: 57.0 sol g i: 0.0 d i: 73.0 sol taoi: 57.0 sol deltai: 73.0 sol deltai - sol taoi: 16.0 sol taoP
           i: 4.0 1_i: 5.0 p_i: 11.0 al_i: 57.0
          57.0 sol_deltaP: 61.0 sol_deltaP - sol_taoP: 4.0 cI_i: 4151447.0 sol_c_i: 4151447.0 sol_gp_i: 0.0 total work: 4218304.0 wasted work: 0.
       2535881719288131
            i: 5.0 1_i: 6.0 p_i: 6.0 aI_i: 15.0
                                                                                   sol_a_i: 15.0 sol_g_i: 0.0 d_i: 27.0 sol_taoi: 15.0 sol_deltai: 25.0 sol_deltai - sol_taoi: 10.0 sol_taoP:
                   sol_deltaP: 18.0 sol_deltaP - sol_taoP: 3.0 eL_i: 2468720.0 sol_e_i: 2468720.0 sol_gp_i: 0.0 total work: 2768262.0 wasted work: 1.
       1361608836157848
            i: 6.0 1_i: 6.0 p_i: 0.0 aI_i: 6.0
                                                                                    sol_a_i: 6.0 sol_g_i: 0.0 d_i: 26.0 sol_taoi: 6.0 sol_deltai: 22.0 sol_deltai - sol_taoi: 16.0 sol_taoP: 6.0
                                             sol_deltaP - sol_taoP: 4.0 cl_i: 4132297.0 sol_c_i: 4132297.0 sol_gp_i: 0.0 total work: 4218304.0 wasted work: 0.
       3262239990289936
            i: 7.0 1_i: 5.0 p_i: 6.0 aI_i: 61.0
                                                                                    sol_a_i: 61.0 sol_g_i: 0.0 d_i: 83.0 sol_taoi: 61.0 sol_deltai: 77.0 sol_deltai - sol_taoi: 16.0 sol_taoP:
36
                    sol_deltaP: 67.0 sol_deltaP - sol_taoP: 6.0 cI_i: 4095642.0
                                                                                                                                      sol_c_i: 4095642.0 sol_gp_i: 0.0 total work: 4481948.0 wasted work: 1.
       4652561787865455
                                                                                    sol a i: 55.0 sol g i: 0.0 d i: 71.0 sol taoi: 55.0 sol deltai: 70.0 sol deltai - sol taoi: 15.0 sol taoP:
37
            i: 8.0 1 i: 6.0 p i: 0.0 aI i: 55.0
                    sol_deltaP: 50.0 sol_deltaP - sol_taoP: 4.0 cl_i: 3790096.0 sol_c_i: 3790096.0 sol_gp_i: 0.0 total work: 3954660.0 wasted work: 0.
       6241901958701885
      Time: 51.000000
39
40
41
42
```