```
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=52658
  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 6.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 = 362.0
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 = 362.0
               Deterministic Sub problem Status= 2, is Optimal
21
22
               Master protblem status = 2, is Optimal
               1b = 599.0
                                                         ub = 599.0
                MPObj = 599.0 MP_delete_Hua_Obj = 362.0
24
                                                                                                            Hua = 237.0
                                                                                                                                          SPObi = 362.0
                                                                                                                                                                        MP SP Obj = 237.0
                                                                                                                                                                                                                          Deter SP Obj = 237.0
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
          i: 0.0 1_i: 5.0 p_i: 29.0 aI_i: 18.0 sol_a_i: 18.0 sol_g_i: 0.0 d_i: 28.0 sol_taoi: 18.0 sol_deltai: 28.0 so
29
                                                                                        sol\_a\_i: 18.0 \quad sol\_g\_i: 0.0 \quad d\_i: 28.0 \quad sol\_taoi: 18.0 \quad sol\_deltai: 28.0 \quad sol\_deltai - sol\_taoi: 10.0 \quad sol\_taoP
       7909984676305928
                                                                                    sol_a_i: 43.0 sol_g_i: 0.0 d_i: 56.0 sol_taoi: 43.0 sol_deltai: 56.0 sol_deltai - sol_taoi: 13.0 sol_taoP
30
           i: 1.0 1_i: 5.0 p_i: 29.0 aI_i: 43.0
       : 43.0 sol deltaP: 46.0 sol deltaP - sol taoP: 3.0 cl i: 3276636.0 sol c i: 3276636.0 sol gp i: 0.0 total work: 3559194.0 wasted work: 1.
       0717406806147685
                                                                                        sol_a_i: 7.0 sol_g_i: 0.0 d_i: 24.0 sol_taoi: 7.0 sol_deltai: 24.0 sol_deltai - sol taoi: 17.0 sol taoP: 7
           i: 2.0 1_i: 5.0 p_i: 24.0 aI_i: 7.0
                sol_deltaP: 10.0 sol_deltaP - sol_taoP: 3.0 cl_i: 4350546.0 sol_c_i: 4350546.0 sol_gp_i: 0.0 total work: 4745592.0 wasted work: 1.
       498406942695453
32
           i: 3.0 1 i: 4.0 p i: 18.0 aI i: 0.0
                                                                                       sol_a_i: 0.0 sol_g_i: 0.0 d_i: 11.0 sol_taoi: 0.0 sol_deltai: 11.0 sol_deltai - sol_taoi: 11.0 sol_taoP: 0
                sol_deltaP: 3.0 sol_deltaP - sol_taoP: 3.0 cl_i: 2636652.0 sol_c_i: 2636652.0 sol_gp_i: 0.0 total work: 3954660.0 wasted work: 4.
       999195885360562
         i: 4.0 1_i: 6.0 p_i: 23.0 al_i: 37.0 sol_a_i: 37.0 sol_g_i: 0.0 d_i: 49.0 sol_taoi: 37.0 sol_deltai: 49.0 sol_deltai: 49.0 sol_deltai: 49.0 sol_deltai: 37.0 sol_deltai - sol_taoi: 12.0 sol_deltai - sol_taoi: 20.0 sol_deltai - 
                                                                                       sol a i: 37.0 sol g i: 0.0 d i: 49.0 sol taoi: 37.0 sol deltai: 49.0 sol deltai - sol taoi: 12.0 sol taoP
       24572908922638104
           i: 5.0 1_i: 4.0 p_i: 14.0 aI_i: 3.0
                                                                                        sol_a_i: 3.0 sol_g_i: 0.0 d_i: 30.0 sol_taoi: 3.0 sol_deltai: 27.0 sol_deltai - sol_taoi: 24.0 sol_taoP: 3
               sol deltaP: 7.0 sol_deltaP - sol_taoP: 4.0 cl_i: 6232095.0 sol_c_i: 6232095.0 sol_gp_i: 0.0 total work: 6327456.0 wasted work: 0.
       3617036609974056
                                                                                   sol a i: 45.0 sol g i: 0.0 d i: 73.0 sol taoi: 45.0 sol deltai: 71.0 sol deltai - sol taoi: 26.0 sol taoP:
35
           i: 6.0 1_i: 7.0 p_i: 7.0 aI_i: 45.0
       45.0 sol_deltaP: 51.0 sol_deltaP - sol_taoP: 6.0 cI_i: 6830173.0
                                                                                                                                     sol_c_i: 6830173.0 sol_gp_i: 0.0 total work: 6986566.0 wasted work: 0.
       5931976453095842
           i: 7.0 1_i: 7.0 p_i: 0.0 aI_i: 38.0
                                                                                    sol_a_i: 38.0 sol_g_i: 0.0 d_i: 65.0 sol_taoi: 38.0 sol_deltai: 58.0 sol_deltai - sol_taoi: 20.0 sol_taoP:
36
                    sol_deltaP: 43.0 sol_deltaP - sol_taoP: 5.0 cI_i: 5190682.0
                                                                                                                                      sol_c_i: 5190682.0 sol_gp_i: 0.0 total work: 5272880.0 wasted work: 0.
                                                                                       sol a i: 14.0 sol g i: 0.0 d i: 40.0 sol taoi: 14.0 sol deltai: 38.0 sol deltai - sol taoi: 24.0 sol taoP
37
            i: 8.0 1 i: 5.0 p i: 18.0 aI i: 14.0
         14.0 sol_deltaP: 18.0 sol_deltaP - sol_taoP: 4.0 cl_i: 6104136.0 sol_c_i: 6104136.0 sol_gp_i: 0.0 total work: 6327456.0 wasted work: 0.
       8470513267891551
      Time: 73.000000
39
40
41
42
```