```
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=52141
  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 8 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 = 372.0
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 = 372.0
             Deterministic Sub problem Status= 2, is Optimal
21
22
             Master protblem status = 2, is Optimal
                                                  ub = 657.0
              MPObj = 657.0 MP_delete_Hua_Obj = 372.0
24
                                                                                              Hua = 285.0
                                                                                                                       SPObi = 372.0
                                                                                                                                                  MP SP Obj = 285.0
                                                                                                                                                                                             Deter SP Obj = 285.0
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: 35.0
                                                                            sol\_a\_i: 35.0 \quad sol\_g\_i: 0.0 \quad d\_i: 55.0 \quad sol\_taoi: 35.0 \quad sol\_deltai: 55.0 \quad sol\_deltai - sol\_taoi: 20.0 \quad sol\_taoP
         35.0 sol_deltaP: 41.0 sol_deltaP - sol_taoP: 6.0 cl_i: 5034915.0 sol_c_i: 5034915.0 sol_gp_i: 0.0 total work: 5141058.0 wasted work: 0.
      40259971780127746
      i: 1.0 1_i: 7.0 p_i: 16.0 al_i: 35.0 sol_a_i: 35.0 sol_g_i: 0
: 35.0 sol_deltaP: 40.0 sol_deltaP - sol_taoP: 5.0 cl_i: 2775624.0
                                                                         sol_a_i: 35.0 sol_g_i: 0.0 d_i: 46.0 sol_taoi: 35.0 sol_deltai: 46.0 sol_deltai - sol_taoi: 11.0 sol_taoP
30
                                                                                                                   sol_c_i: 2775624.0 sol_gp_i: 0.0 total work: 2900084.0 wasted work: 0.
      4720759812474397
                                                                            sol\_a\_i: \ 5.0 \quad sol\_g\_i: \ 0.0 \quad d\_i: \ 14.0 \quad sol\_taoi: \ 5.0 \quad sol\_deltai: \ 14.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol \ taoP: \ 5.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol \ taoP: \ 5.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol \ taoP: \ 5.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol \ taoP: \ 5.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol \ taoP: \ 5.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol \ taoP: \ 5.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol \ taoP: \ 5.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol \ taoP: \ 5.0 \quad sol\_deltai - sol\_taoi: \ 9.0 \quad sol\_ta
          i: 2.0 1_i: 6.0 p_i: 28.0 aI_i: 5.0
              sol_deltaP: 7.0 sol_deltaP - sol_taoP: 2.0 el_i: 2161001.0 sol_e_i: 2161001.0 sol_gp_i: 0.0 total work: 2636440.0 wasted work: 1.
        i: 3.0 l_i: 6.0 p_i: 23.0 al_i: 36.0 sol_a_i: 36.0 sol_g_i: 0.0 d_i: 46.0 sol_taoi: 36.0 sol_deltai: 46.0 sol_deltai - sol_taoi: 10.0 sol_deltap - sol_taop: 2.0 cl_i: 2554319.0 sol_c_i: 2554319.0 sol_gp_i: 0.0 total work: 2636440.0 wasted work: 0.
32
                                                                         sol a i: 36.0 sol g i: 0.0 d i: 46.0 sol taoi: 36.0 sol deltai: 46.0 sol deltai - sol taoi: 10.0 sol taoP
      31148442596835124
                                                                       sol a i: 10.0 sol g i: 0.0 d i: 34.0 sol taoi: 10.0 sol deltai: 34.0 sol deltai - sol taoi: 24.0 sol taoP:
          i: 4.0 1_i: 6.0 p_i: 7.0 aI_i: 10.0
      10.0 sol deltaP: 14.0 sol deltaP - sol_taoP: 4.0 cl_i: 6132769.0 sol_c_i: 6132769.0 sol_gp_i: 0.0 total work: 7382032.0 wasted work: 4.
      738446541548452
          i: 5.0 1_i: 7.0 p_i: 22.0 aI_i: 65.0
                                                                           sol_a_i: 65.0 sol_g_i: 0.0 d_i: 80.0 sol_taoi: 65.0 sol_deltai: 75.0 sol_deltai - sol_taoi: 10.0 sol_taoP
         65.0 sol_deltaP: 67.0 sol_deltaP - sol_taoP: 2.0 cl_i: 2503846.0 sol_c_i: 2503846.0 sol_gp_i: 0.0 total work: 2636440.0 wasted work: 0.
      5029281910455008
                                                                        sol_a_i: 47.0 sol_g_i: 0.0 d_i: 68.0 sol_taoi: 47.0 sol_deltai: 60.0 sol_deltai - sol_taoi: 13.0 sol_taoP:
         i: 6.0 1_i: 6.0 p_i: 7.0 aI_i: 47.0
      47.0 sol_deltaP: 49.0 sol_deltaP - sol_taoP: 2.0 cI_i: 3334365.0
                                                                                                                    sol_c_i: 3334365.0 sol_gp_i: 0.0 total work: 3691016.0 wasted work: 1.
      3527749541047775
          i: 7.0 \ l_i: 7.0 \ p_i: 0.0 \ al_i: 24.0
                                                                        sol_a_i: 24.0 sol_g_i: 0.0 d_i: 52.0 sol_taoi: 24.0 sol_deltai: 42.0 sol_deltai - sol_taoi: 18.0 sol_taoP:
36
                 sol deltaP: 29.0 sol deltaP - sol taoP: 5.0 cI i: 4617655.0
                                                                                                                    sol_c_i: 4617655.0 sol_gp_i: 0.0 total work: 5272880.0 wasted work: 2.
      4852642199329398
     Time: 34.000000
38
39
40
41
```