```
unknown
    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=50785
 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 9.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 = 388.0
16
                          ub = inf
    The initial lb = -inf
17
18
19
    The current iteration cnt = 0
20
         The SP model was solved Optimal 2 and SPObj = 388.0
         Deterministic Sub problem Status= 2, is Optimal
21
22
         Master protblem status = 2, is Optimal
                               ub = 673.0
         MPObj = 673.0
                          MP_delete_Hua_Obj = 388.0
24
                                                          Hua = 285.0
                                                                          SPObi = 388.0
                                                                                           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: 4.0 p_i: 30.0 aI_i: 56.0
                                               sol_a_i: 56.0 sol_g_i: 0.0 d_i: 81.0 sol_taoi: 56.0 sol_deltai: 81.0 sol_deltai - sol_taoi: 25.0 sol_taoP
      56.0 sol_deltaP: 61.0 sol_deltaP - sol_taoP: 5.0 cl_i: 6377423.0 sol_c_i: 6377423.0 sol_gp_i: 0.0 total work: 6591100.0 wasted work: 0.
    8104754896754714
                                             sol\_a\_i: \ 0.0 \quad sol\_g\_i: \ 0.0 \quad d\_i: \ 9.0 \quad sol\_taoi: \ 0.0 \quad sol\_deltai: \ 9.0 \quad sol\_deltai: \ 9.0 \quad sol\_taoi: \ 9.0 \quad sol\_taoP: \ 0.0
30
      i: 1.0 1_i: 7.0 p_i: 7.0 aI_i: 0.0
    sol deltaP: 2.0 sol deltaP - sol taoP: 2.0 cI i: 2335732.0
                                                              sol_c_i: 2335732.0 sol_gp_i: 0.0 total work: 4218304.0 wasted work: 7.
    140583514132694
                                               sol_a_i: 33.0 sol_g_i: 0.0 d_i: 57.0 sol_taoi: 33.0 sol_deltai: 57.0 sol_deltai - sol_taoi: 24.0 sol_taoP
       i: 2.0 \ 1_i: 7.0 \ p_i: 23.0 \ aI_i: 33.0
     33.0 sol_deltaP: 37.0 sol_deltaP - sol_taoP: 4.0 cl_i: 6133829.0 sol_c_i: 6133829.0 sol_gp_i: 0.0 total work: 7382032.0 wasted work: 4.
    734425968351261
     i: 3.0 1_i: 7.0 p_i: 16.0 aI_i: 24.0 sol_a_i: 24.0 sol_g_i: 0.0 d_i: 37.0 sol_taoi: 24.0 sol_deltai: 37.0 sol_deltai: 37.0 sol_deltai: 37.0 sol_deltai - sol_taoi: 13.0 sol_deltaP - sol_taoi: 24.0 sol_deltaP - sol_taoi: 3192893.0 sol_c_i: 3192893.0 sol_gp_i: 0.0 total work: 4218304.0 wasted work: 3.
32
                                              sol a i: 24.0 sol g i: 0.0 d i: 37.0 sol taoi: 24.0 sol deltai: 37.0 sol deltai - sol taoi: 13.0 sol taoP
    889377342173537
                                               sol a i: 42.0 sol g i: 0.0 d i: 61.0 sol taoi: 42.0 sol deltai: 61.0 sol deltai - sol taoi: 19.0 sol taoP
      i: 4.0 1_i: 6.0 p_i: 10.0 aI_i: 42.0
     42.0 sol_deltaP: 45.0 sol_deltaP - sol_taoP: 3.0 cI_i: 4985448.0 sol_c_i: 4985448.0 sol_gp_i: 0.0 total work: 5009236.0 wasted work: 0.
    09022773133467858
       i: 5.0 1_i: 6.0 p_i: 0.0 aI_i: 40.0
                                             sol_a_i: 40.0 sol_g_i: 0.0 d_i: 59.0 sol_taoi: 40.0 sol_deltai: 59.0 sol_deltai - sol_taoi: 19.0 sol_taoP:
          sol deltaP: 47.0 sol deltaP - sol taoP: 7.0 cl i: 4752884.0
                                                                       sol_c_i: 4752884.0 sol_gp_i: 0.0 total work: 5009236.0 wasted work: 0.
    9723414907981975
      i: 6.0 1 i: 4.0 p i: 6.0 aI i: 51.0
                                             sol a i: 51.0 sol g i: 0.0 d i: 59.0 sol taoi: 51.0 sol deltai: 59.0 sol deltai - sol taoi: 8.0 sol taoP:
          sol_deltaP: 55.0 sol_deltaP - sol_taoP: 4.0 cI_i: 1986730.0
                                                                       sol_c_i: 1986730.0 sol_gp_i: 0.0 total work: 2109152.0 wasted work: 0.
    4643458603268043
       i: 7.0 1_i: 7.0 p_i: 0.0 aI_i: 7.0
                                             sol_a_i: 7.0 sol_g_i: 0.0 d_i: 35.0 sol_taoi: 7.0 sol_deltai: 25.0 sol_deltai - sol_taoi: 18.0 sol_taoP: 7.0
36
       sol deltaP: 12.0
                        sol_deltaP - sol_taoP: 5.0 eLi: 4534126.0 sol_c_i: 4534126.0 sol_gp_i: 0.0 total work: 4745592.0 wasted work: 0.
    8020891808651059
    Time: 40.000000
37
38
39
40
41
```