```
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=5476
 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 5.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 = 305.0
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 = 305.0
         Deterministic Sub problem Status= 2, is Optimal
21
22
         Master protblem status = 2, is Optimal
                               ub = 514.0
         MPObj = 514.0 MP_delete_Hua_Obj = 305.0
24
                                                          Hua = 209.0
                                                                         SPObi = 305.0
                                                                                           MP SP Obj = 209.0
                                                                                                                   Deter SP Obj = 209.0
25
26
    ub - 1b = 0.0
27
28 Iteration cycle stopped by termination criterion 1: Because ub - lb \leq eps, the iteration stop, and cnt = 0
29
       i: 0.0 1_i: 6.0 p_i: 24.0 aI_i: 31.0
                                               sol\_a\_i: 31.0 \quad sol\_g\_i: 0.0 \quad d\_i: 54.0 \quad sol\_taoi: 31.0 \quad sol\_deltai: 52.0 \quad sol\_deltai - sol\_taoi: 21.0 \quad sol\_taoP
      31.0 sol_deltaP: 36.0 sol_deltaP - sol_taoP: 5.0 cl_i: 5359714.0 sol_c_i: 5359714.0 sol_gp_i: 0.0 total work: 5404702.0 wasted work: 0.
    1706391952784816
      i: 1.0 1_i: 4.0 p_i: 13.0 aI_i: 40.0
                                              sol_a_i: 40.0 sol_g_i: 0.0 d_i: 61.0 sol_taoi: 40.0 sol_deltai: 59.0 sol_deltai - sol_taoi: 19.0 sol_taoP
30
                                                                      sol c i: 4895377.0 sol gp i: 0.0 total work: 5141058.0 wasted work: 0.
     40.0 sol deltaP: 44.0 sol deltaP - sol taoP: 4.0 cI i: 4895377.0
    931866456281956
     i: 2.0 <u>l_i</u>: 5.0 <u>p_i</u>: 19.0 <u>aL_i</u>: 29.0 <u>sol_a_i</u>: 29.0 <u>sol_g_i</u>: 0
29.0 <u>sol_delta</u>P: 35.0 <u>sol_delta</u>P - <u>sol_tao</u>P: 6.0 <u>cL_i</u>: 7083212.0
                                               sol_a_i: 29.0 sol_g_i: 0.0 d_i: 58.0 sol_taoi: 29.0 sol_deltai: 56.0 sol_deltai - sol_taoi: 27.0 sol_taoP
                                                                      sol_c_i: 7083212.0 sol_gp_i: 0.0 total work: 7250210.0 wasted work: 0.
    6334223422493969
    i: 3.0 1_i: 4.0 p_i: 7.0 al_i: 15.0 sol_a_i: 15.0 sol_g_i: 0.0 15.0 sol_deltaP: 18.0 sol_deltaP - sol_taoP: 3.0 cl_i: 2853823.0
32
                                            sol a i: 15.0 sol g i: 0.0 d i: 28.0 sol taoi: 15.0 sol deltai: 26.0 sol deltai - sol taoi: 11.0 sol taoP:
                                                                       sol_c_i: 2853823.0 sol_gp_i: 0.0 total work: 3163728.0 wasted work: 1.
    175467676108692
                                            sol a i: 24.0 sol g i: 0.0 d i: 57.0 sol taoi: 24.0 sol deltai: 51.0 sol deltai - sol taoi: 27.0 sol taoP:
      i: 4.0 1_i: 7.0 p_i: 0.0 aI_i: 24.0
    24.0 sol_deltaP: 31.0 sol_deltaP - sol_taoP: 7.0 cl_i: 6925790.0
                                                                       sol_c_i: 6925790.0 sol_gp_i: 0.0 total work: 7118388.0 wasted work: 0.
    7305229779551213
       i: 5.0 1_i: 6.0 p_i: 7.0 aI_i: 33.0
                                            sol_a_i: 33.0 sol_g_i: 0.0 d_i: 64.0 sol_taoi: 33.0 sol_deltai: 61.0 sol_deltai - sol_taoi: 28.0 sol_taoP:
           sol_deltaP: 45.0 sol_deltaP - sol_taoP: 12.0 cl_i: 7286814.0 sol_c i: 7286814.0 sol_gp_i: 0.0 total work: 7382032.0 wasted work: 0.
    36116126291514317
    Time: 57.000000
37
38
39
```