```
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=6433
   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 5 5.xlsx instance by ECCG for deterministic model
 13
 14
 15
          Set parameter MIPGap to value 0.01
 16
                      Master protblem status = 2, is Optimal and MP obj = 247.0
          The initial lb = -inf
                                                                     ub = inf
 17
 18
 19
          The current iteration cnt = 0
20
                       The SP model was solved Optimal 2 and SPObj = 247.0
                      Deterministic Sub problem Status= 2, is Optimal
21
22
                      Master protblem status = 2, is Optimal
 23
                                                                                 ub = 432.0
                      1b = 432.0
                        MPObj = 432.0
                                                                    MP_delete_Hua_Obj = 247.0
 24
                                                                                                                                                         Hua = 185.0
                                                                                                                                                                                                   SPObi = 247.0
                                                                                                                                                                                                                                             MP SP Obj = 185.0
                                                                                                                                                                                                                                                                                                                    Deter SP Obj = 185.0
 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: 0.0 aI_i: 57.0
                                                                                                                     sol_a_i: 57.0 sol_g_i: 0.0 d_i: 73.0 sol_taoi: 57.0
                                                                                                                                                                                                                                                                   sol_deltai: 71.0 sol_deltai - sol_taoi: 14.0 sol_taoP:
           57.0
                            sol deltaP: 61.0
                                                                          sol_deltaP - sol_taoP: 4.0 cI_i: 3449733.0
                                                                                                                                                                                          sol_c_i: 3449733.0 sol_gp_i: 0.0 total work: 4218304.0 wasted work: 2.
          915184870507199
                                                                                                                      sol\_a\_i: \ 3.0 \quad sol\_g\_i: \ 0.0 \quad d\_i: \ 31.0 \quad sol\_taoi: \ 3.0 \quad sol\_deltai: \ 29.0 \quad sol\_deltai - sol\_taoi: \ 26.0 \quad sol\_taoP: \ 3.0 \quad sol\_taoP: \ 3.0 \quad sol\_deltai - sol\_taoi: \ 26.0 \quad sol\_taoP: \ 3.0 \quad sol
 30
                  i: 1.0 1_i: 4.0 p_i: 0.0 aI_i: 3.0
                  sol deltaP: 13.0
                                                                sol_deltaP - sol_taoP: 10.0 cI_i: 6779551.0 sol_c_i: 6779551.0 sol_gp_i: 0.0 total work: 7118388.0 wasted work: 1.
          2852065664304897
                                                                                                                      sol_a_i: 41.0 sol_g_i: 0.0 d_i: 68.0 sol_taoi: 41.0 sol_deltai: 66.0 sol deltai - sol taoi: 25.0 sol taoP:
                  i: \ 2.0 \ 1\_i: \ 7.0 \ p\_i: \ 7.0 \ aI\_i: \ 41.0
           41.0
                           sol_deltaP: 49.0 sol_deltaP - sol_taoP: 8.0 cI_i: 6529882.0
                                                                                                                                                                                           sol_c_i: 6529882.0 sol_gp_i: 0.0 total work: 6722922.0 wasted work: 0.
           732199481118478
                 i: 3.0 1_i: 5.0 p_i: 4.0 al_i: 9.0 sol_deltaP: 23.0 sol deltaP - sol ta
                                                                                                                      sol\_a\_i: 9.0 \quad sol\_g\_i: 0.0 \quad d\_i: 38.0 \quad sol\_taoi: 9.0 \quad sol\_deltai: 36.0 \quad sol\_deltai - sol \quad taoi: 27.0 \quad sol \quad taoP: 9.0 \quad sol\_deltai - sol \quad taoi: 27.0 \quad sol \quad taoP: 9.0 \quad sol\_deltai - sol \quad taoi: 27.0 \quad sol \quad taoP: 9.0 \quad taoP:
 32
                                                               sol_deltaP - sol_taoP: 14.0 cl_i: 6978953.0 sol_c_i: 6978953.0 sol_gp_i: 0.0 total work: 7118388.0 wasted work: 0.
          5288760601417063
                                                                                                                     sol a i: 36.0 sol g i: 0.0 d i: 50.0 sol taoi: 37.0 sol deltai: 45.0 sol deltai - sol taoi: 8.0 sol taoP:
                  i: 4.0 1_i: 7.0 p_i: 0.0 aI_i: 36.0
          37.0 sol_deltaP: 39.0 sol_deltaP - sol_taoP: 2.0 cl_i: 1982554.0 sol_c_i: 1982554.0 sol_gp_i: 0.0 total work: 2109152.0 wasted work: 0.
          4801854015263006
          Time: 16.000000
 35
 36
 37
 38
```