```
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=7479

import sys; print('Python %s on %s' % (sys.version, sys.platform))
sys.path.extend(['E:\\1 □□□□\\3 □□□□□\\1 □□□□□□□\\1 □□□□□□□□□\\1_□□□□□□_□□□□\\1_LW _□□□□1\\4 □□□□\\3 python_code\\9 Code for this paper', 'E:/1 □□□□/3 □□□□□/1 □□□□□□/1 □□□□□□□□/1_□□□□□□_□□□□/1_LW _□□□□1/4 □□□□/3 python_code/9 Code for this paper'])

PyDev console: starting.

Python 3.9.7 (tags/v3.9.7:1016ef3, Aug 30 2021, 20:19:38) [MSC v.1929 64 bit (AMD64)] on win32
>>> runfile('E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□/1_□□□□□□_□□□□/1_LW _□□□□1/4 □□□□/3 python_code/9 Code for this paper/main_ECCG_deterministic.py', wdir='E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□□/1_□□□□□□_□□□□/1_LW _□□□□1/4 □□□□/3 python_code/9 Code for this paper')
Backend TkAgg is interactive backend. Turning interactive mode on.
Waiting 5s.....

Optimize the  ./R_7_5.xlsx  instance by ECCG for deterministic model

Set parameter MIPGap to value 0.01
      Master protblem status =  2 , is Optimal and MP obj =  218.0
The initial lb =  -inf       ub =  inf

The current iteration cnt =  0
      The SP model was solved Optimal 2 and SPObj =  218.0
      Deterministic Sub problem Status=  2 , is Optimal
      Master protblem status =  2 , is Optimal
      lb =  370.0                  ub =  370.0
       MPObj =  370.0     MP_delete_Hua_Obj =  218.0       Hua =  152.0       SPObj =  218.0       MP_SP_Obj =  152.0         Deter_SP_Obj =  152.0

ub - lb =  0.0

Iteration cycle stopped by termination criterion 1: Because ub - lb <= eps, the iteration stop, and cnt =  0
    i:  0.0  l_i:  7.0   p_i:  27.0    aI_i:  38.0      sol_a_i:  38.0  sol_g_i:  0.0    d_i:  52.0    sol_taoi:  38.0    sol_deltai:  52.0  sol_deltai - sol_taoi:  14.0  sol_taoP:  38.0  sol_deltaP:  41.0    sol_deltaP - sol_taoP:  3.0  cI_i:  3637964.0    sol_c_i:  3637964.0    sol_gp_i:  0.0  total work:  3954660.0    wasted work:  1.2012258955257848
    i:  1.0  l_i:  6.0   p_i:  21.0    aI_i:  12.0      sol_a_i:  12.0  sol_g_i:  0.0    d_i:  26.0    sol_taoi:  12.0    sol_deltai:  26.0  sol_deltai - sol_taoi:  14.0  sol_taoP:  12.0  sol_deltaP:  15.0    sol_deltaP - sol_taoP:  3.0  cI_i:  3529264.0    sol_c_i:  3529264.0    sol_gp_i:  0.0  total work:  3954660.0    wasted work:  1.613524297916888
    i:  2.0  l_i:  4.0   p_i:  17.0    aI_i:  4.0       sol_a_i:  4.0   sol_g_i:  0.0    d_i:  15.0    sol_taoi:  4.0   sol_deltai:  15.0  sol_deltai - sol_taoi:  11.0  sol_taoP:  4.0    sol_deltaP:  8.0   sol_deltaP - sol_taoP:  4.0  cI_i:  2863362.0    sol_c_i:  2863362.0    sol_gp_i:  0.0  total work:  3163728.0    wasted work:  1.139286310327563
    i:  3.0  l_i:  4.0   p_i:  11.0    aI_i:  9.0       sol_a_i:  9.0   sol_g_i:  0.0    d_i:  19.0    sol_taoi:  9.0   sol_deltai:  19.0  sol_deltai - sol_taoi:  10.0  sol_taoP:  9.0    sol_deltaP:  12.0    sol_deltaP - sol_taoP:  3.0  cI_i:  2387699.0    sol_c_i:  2387699.0    sol_gp_i:  0.0  total work:  2768262.0    wasted work:  1.4434730166436558
    i:  4.0  l_i:  7.0   p_i:  4.0   aI_i:  16.0      sol_a_i:  16.0  sol_g_i:  0.0    d_i:  38.0    sol_taoi:  16.0    sol_deltai:  36.0  sol_deltai - sol_taoi:  20.0  sol_taoP:  16.0    sol_deltaP:  26.0    sol_deltaP - sol_taoP:  10.0    cI_i:  5263637.0    sol_c_i:  5263637.0    sol_gp_i:  0.0  total work:  5272880.0    wasted work:  0.03505863968078166
    i:  5.0  l_i:  6.0   p_i:  11.0    aI_i:  28.0      sol_a_i:  28.0  sol_g_i:  0.0    d_i:  50.0    sol_taoi:  28.0    sol_deltai:  44.0  sol_deltai - sol_taoi:  16.0  sol_taoP:  28.0  sol_deltaP:  32.0    sol_deltaP - sol_taoP:  4.0  cI_i:  4201228.0    sol_c_i:  4201228.0    sol_gp_i:  0.0  total work:  4481948.0    wasted work:  1.064769158410584
    i:  6.0  l_i:  4.0   p_i:  0.0   aI_i:  10.0      sol_a_i:  10.0  sol_g_i:  0.0    d_i:  32.0    sol_taoi:  10.0    sol_deltai:  26.0  sol_deltai - sol_taoi:  16.0  sol_taoP:  10.0    sol_deltaP:  18.0    sol_deltaP - sol_taoP:  8.0  cI_i:  4169576.0    sol_c_i:  4169576.0    sol_gp_i:  0.0  total work:  4218304.0    wasted work:  0.18482499127611476
Time: 29.000000
```