```
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=6184

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_5_2.xlsx  instance by ECCG for deterministic model

Set parameter MIPGap to value 0.01
      Master protblem status =  2 , is Optimal and MP obj =  217.0
The initial lb =  -inf       ub =  inf

The current iteration cnt =  0
      The SP model was solved Optimal 2 and SPObj =  217.0
      Deterministic Sub problem Status=  2 , is Optimal
      Master protblem status =  2 , is Optimal
      lb =  373.0                  ub =  373.0
       MPObj =  373.0     MP_delete_Hua_Obj =  217.0       Hua =  156.0       SPObj =  217.0       MP_SP_Obj =  156.0         Deter_SP_Obj =  156.0

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:  4.0   p_i:  0.0  aI_i:  49.0       sol_a_i:  49.0  sol_g_i:  0.0   d_i:  67.0    sol_taoi:  49.0    sol_deltai:  65.0  sol_deltai - sol_taoi:  16.0  sol_taoP:  49.0    sol_deltaP:  55.0    sol_deltaP - sol_taoP:  6.0  cI_i:  4187941.0    sol_c_i:  4187941.0    sol_gp_i:  0.0  total work:  4218304.0    wasted work:  0.11516666413800428
    i:  1.0  l_i:  5.0   p_i:  10.0    aI_i:  7.0        sol_a_i:  7.0   sol_g_i:  0.0   d_i:  29.0    sol_taoi:  7.0   sol_deltai:  27.0  sol_deltai - sol_taoi:  20.0  sol_taoP:  7.0    sol_deltaP:  13.0    sol_deltaP - sol_taoP:  6.0  cI_i:  5118689.0    sol_c_i:  5118689.0    sol_gp_i:  0.0  total work:  5141058.0    wasted work:  0.08484547344145894
    i:  2.0  l_i:  4.0   p_i:  0.0  aI_i:  15.0       sol_a_i:  15.0  sol_g_i:  0.0   d_i:  40.0    sol_taoi:  15.0    sol_deltai:  38.0  sol_deltai - sol_taoi:  23.0  sol_taoP:  15.0    sol_deltaP:  27.0    sol_deltaP - sol_taoP:  12.0    cI_i:  5958858.0    sol_c_i:  5958858.0    sol_gp_i:  0.0  total work:  6063812.0    wasted work:  0.3980898484319765
    i:  3.0  l_i:  7.0   p_i:  4.0  aI_i:  41.0       sol_a_i:  41.0  sol_g_i:  0.0   d_i:  59.0    sol_taoi:  41.0    sol_deltai:  52.0  sol_deltai - sol_taoi:  11.0  sol_taoP:  41.0    sol_deltaP:  44.0    sol_deltaP - sol_taoP:  3.0  cI_i:  2778960.0    sol_c_i:  2778960.0    sol_gp_i:  0.0  total work:  3163728.0    wasted work:  1.4594225546570376
    i:  4.0  l_i:  6.0   p_i:  15.0    aI_i:  13.0       sol_a_i:  13.0  sol_g_i:  0.0   d_i:  45.0    sol_taoi:  13.0    sol_deltai:  35.0  sol_deltai - sol_taoi:  22.0  sol_taoP:  13.0  sol_deltaP:  17.0    sol_deltaP - sol_taoP:  4.0  cI_i:  5536838.0    sol_c_i:  5536838.0    sol_gp_i:  0.0  total work:  5800168.0    wasted work:  0.9988090000151719
Time: 20.000000
```