```
"E:\1 □□□□\3 □□□□□\1 □□□□□□\1 □□□□□□□□\1_□□□□□□_□□□□\1_LW _□□□□\4 □□□□\3 python_code\1 exzample\2 □□□□□□\9 Code for this paper\Scripts\python.exe" "D:\Python\Pycharm\setroute\PyCharm Community Edition 2021.2.3\plugins\python-ce\helpers\pydev\pydevconsole.py" --mode=client --port=28240

import sys; print('Python %s on %s' % (sys.version, sys.platform))
sys.path.extend(['E:\\1 □□□□\\3 □□□□□□\\1 □□□□□□□□\\1_□□□□□□_□□□□\\1_LW _□□□□\\4 □□□□\\3 python_code\\9 Code for this paper', 'E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□/1_□□□□□□_□□□□/1_LW _□□□□/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 _□□□□/4 □□□□/3 python_code/9 Code for this paper/main_RO_CCG_ExtendedByMe.py', wdir='E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□□/1_□□□□□□_□□□□/1_LW _□□□□/4 □□□□/3 python_code/9 Code for this paper')
Backend TkAgg is interactive backend. Turning interactive mode on.
Waiting 5s.....

Optimize the  ./R_5_1.xlsx  instance by ECCG

      Master protblem status =  2 , is Optimal and MP obj =  192.0
The initial lb =  -inf       ub =  inf

The current iteration cnt =  0
      The SP model was solved Optimal 2 and SPObj =  192.0
      Deterministic Sub problem Status=  2 , is Optimal
      Master protblem status =  2 , is Optimal
      lb =  319.0                  ub =  319.0
       MPObj =  319.0     MP_delete_Hua_Obj =  201.0       Hua =  118.0       SPObj =  192.0       Deter_SP_Obj =  118.0

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:  6.0  p_i:  4.0  al_i:  7.0       sol_a_i:  7.0    sol_g_i:  0.0    d_i:  27.0    sol_taoi:  7.0  sol_deltai:  27.0  sol_deltai - sol_taoi:  20.0  sol_taoP:  7.0    sol_deltaP:  12.0     sol_deltaP - sol_taoP:  5.0  cl_i:  5270879.0     sol_c_i:  5270879.0    sol_gp_i:  0.0  total work:  5272880.0    wasted work:  0.007589780158091973
    i:  1.0  l_i:  7.0  p_i:  10.0    al_i:  2.0       sol_a_i:  2.0    sol_g_i:  0.0    d_i:  15.0    sol_taoi:  2.0  sol_deltai:  15.0  sol_deltai - sol_taoi:  13.0  sol_taoP:  2.0     sol_deltaP:  5.0    sol_deltaP - sol_taoP:  3.0  cl_i:  3408100.0     sol_c_i:  3408100.0    sol_gp_i:  0.0  total work:  3954660.0    wasted work:  2.0730985723172157
    i:  2.0  l_i:  4.0  p_i:  -0.0    al_i:  22.0       sol_a_i:  22.0  sol_g_i:  0.0    d_i:  50.0    sol_taoi:  22.0     sol_deltai:  50.0  sol_deltai - sol_taoi:  28.0  sol_taoP:  22.0  sol_deltaP:  29.0     sol_deltaP - sol_taoP:  7.0  cl_i:  7366651.0     sol_c_i:  7366651.0    sol_gp_i:  0.0  total work:  7382032.0    wasted work:  0.05834003428866198
    i:  3.0  l_i:  5.0  p_i:  14.0    al_i:  23.0       sol_a_i:  25.25    sol_g_i:  0.45  d_i:  62.0    sol_taoi:  26.0     sol_deltai:  45.0  sol_deltai - sol_taoi:  19.0  sol_taoP:  26.0     sol_deltaP:  30.0     sol_deltaP - sol_taoP:  4.0  cl_i:  4857867.0     sol_c_i:  5310751.800000001    sol_gp_i:  0.286298189983464  total work:  5536524.0     wasted work:  0.8563525056515576
    i:  4.0  l_i:  6.0  p_i:  8.0  al_i:  30.0       sol_a_i:  36.0  sol_g_i:  0.75  d_i:  70.0    sol_taoi:  36.0     sol_deltai:  64.0  sol_deltai - sol_taoi:  28.0  sol_taoP:  36.0     sol_deltaP:  42.0     sol_deltaP - sol_taoP:  6.0  cl_i:  7318466.0     sol_c_i:  8041142.0    sol_gp_i:  0.9137018100165359    total work:  9359362.0    wasted work:  5.0
Time: 37.000000
```