1 "E:\1 □□□□\3 □□□□□\1 □□□□□□□\1 □□□□□□□□□\1_□□□□□□_□□□□\1_LW_□□□□2\6 □□□□\2 python code\01_My_Python_Code\Scripts\python. exe" "D:\Python\Pycharm\setroute\PyCharm Community Edition 2021.2.3\plugins\python-ce\helpers\pydev\pydevconsole.py" --mode=client --port=50153

2

3 import sys; print('Python %s on %s' % (sys.version, sys.platform))

4 sys.path.extend(['E:\\1 □□□□\\3 □□□□□\\1 □□□□□□□\\1 □□□□□□□□□\\1_□□□□□□_□□□□\\1_LW_□□□□2\\6 □□□□\\2 python code\\01_My_Python_Code', 'E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□□/1_□□□□□□_□□□□/1_LW_□□□□2/6 □□□□/2 python code/01_My_Python_Code'])

5

6 PyDev console: starting.

7

8 Python 3.9.7 (tags/v3.9.7:1016ef3, Aug 30 2021, 20:19:38) [MSC v.1929 64 bit (AMD64)] on win32

9 >>> runfile('E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□□/1_□□□□□□_□□□□/1_LW_□□□□2/6 □□□□/2 python code/01_My_Python_Code/main_BACASP_official_gurobi.py', wdir='E:/1 □□□□/3 □□□□□/1 □□□□□□□/1 □□□□□□□□□/1_□□□□□□_□□□□/1_LW_□□□□2/6 □□□□/2 python code/01_My_Python_Code')

10 Backend TkAgg is interactive backend. Turning interactive mode on.

11 Start.....

12

13 This is the R_9_2 _standerd_test.xlsx optimization results solved by Gurobi

14

15 Set parameter TimeLimit to value 1200

16 Set parameter MIPGap to value 0.005

17

18

19

20 Problem status = 9 , is NOT Optimal

21

22 Problem has 2 objectives

23 Gurobi found 2 solutions

24   Solution 0 :

25   Obj 0 = 6.0

26   Obj 1 = 16.0

27   Solution 1 :

28   Obj 0 = 7.0

29   Obj 1 = 17.0

30

31

32

33 Final solution:

34   Obj0 = 5.0

35   Obj1 = 16.0

36   Total movement of crane: 0.0

37   Total duration time in berth position: 18.0

38   Total index of q during berthing: 408.0

39

40   Specific arrangement:

41   V_id: 0 li: 8.0   xi: 14.2   bow of i: 10.2 tail of i: 18.2   gama_i0: 5.0   gama_i1: 6.0 duration_time_i: 1.0 demand_i: 60 work load_i: 60.0

42   V_id: 1 li: 7.0   xi: 8.2   bow of i: 4.7   tail of i: 11.7   gama_i0: -0.0 gama_i1: 1.0 duration_time_i: 1.0 demand_i: 80 work load_i: 80.0

43   V_id: 2 li: 9.0   xi: 21.0   bow of i: 16.5 tail of i: 25.5   gama_i0: 0.0   gama_i1: 2.0 duration_time_i: 2.0 demand_i: 80 work load_i: 80.0

44   V_id: 3 li: 4.0   xi: 8.1 bow of i: 6.1   tail of i: 10.1   gama_i0: 3.0   gama_i1: 4.0 duration_time_i: 1.0 demand_i: 60 work load_i: 60.0

45   V_id: 4 li: 4.0   xi: 14.2   bow of i: 12.2 tail of i: 16.2   gama_i0: -0.0 gama_i1: 5.0 duration_time_i: 5.0 demand_i: 160 work load_i: 160.0

46   V_id: 5 li: 9.0   xi: 5.5 bow of i: 1.0   tail of i: 10.0   gama_i0: 5.0   gama_i1: 6.0 duration_time_i: 1.0 demand_i: 100 work load_i: 100.0

47   V_id: 6 li: 4.0   xi: 2.0 bow of i: 0.0   tail of i: 4.0 gama_i0: -0.0 gama_i1: 2.0 duration_time_i: 2.0 demand_i: 160 work load_i: 160.0

48   V_id: 7 li: 3.0   xi: 1.5 bow of i: 0.0   tail of i: 3.0 gama_i0: 2.0   gama_i1: 5.0 duration_time_i: 3.0 demand_i: 140 work load_i: 140.0

49   V_id: 8 li: 5.0   xi: 7.7 bow of i: 5.2   tail of i: 10.2 gama_i0: 1.0   gama_i1: 3.0 duration_time_i: 2.0 demand_i: 160 work load_i: 160.0

50

51

52 Finished and CPU Time: 1275.000000

53

54

55

56