


```
80     second level: [1. 2.]
81     third level: [4. 3.]
82     The No. 5 iteration is finished!
83
84     Beging the No. 6 iteration:
85     obj[gen-1] = 6.00    temp_best_value_gen = 6.00
86     No, maintain solution and obj[gen] = 6.00 , and the tolerance_counter = 6
87     solution chromosome =
88     first level: [ [2. 8.]
89     second level: [1. 2.]
90     third level: [4. 3.] ]
91     The No. 6 iteration is finished!
92
93
94     -----
95     The iteration is terminated and then visulize the solution:
96     solution chromosome =
97     first level: [ [2. 8.]
98     second level: [1. 2.]
99     third level: [4. 3.] ]
100     Objective function values and some other indicators:
101     Obj0 = 3.00          Obj1 = 3.00          Obj0 + Obj1 = 6.00
102     Total movement of crane: 0.00
103     Total waiting time in berth position: 3.00
104     Total index of q during berthing: 42.00
105     Specific arrangement for each vessel:
106     V_id: 0             li: 4.0             xi: 2.0             bow of i: 0.0             tail of i: 4.0             gama_i0: 1.0             gama_i1: 3.0
107     duration_time_i: 2.0             demand_i: 160.0             work load_i: 160.0             work load gap_i: 0
108     V_id: 1             li: 8.0             xi: 8.0             bow of i: 4.0             tail of i: 12.0             gama_i0: 2.0             gama_i1: 4.0
109     duration_time_i: 2.0             demand_i: 120.0             work load_i: 120.0             work load gap_i: 0
110
111     Algorithm finished and the total CPU time: 65 s
112     End
113
```