

unknown

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80 cord_individual_obj[indivial_i,:] = [ 16. 7. 111. 118.]
81 cord_individual_obj[indivial_i,:] = [ 17. 8. 121. 129.]
82 cord_individual_obj[indivial_i,:] = [18. 7. 91. 98.]
83 cord_individual_obj[indivial_i,:] = [ 19. 8. 102. 110.]
84 cord_individual_obj[indivial_i,:] = [20. 7. 64. 71.]
85 cord_individual_obj[indivial_i,:] = [21. 7. 83. 90.]
86 cord_individual_obj[indivial_i,:] = [22. 7. 142. 149.]
87 cord_individual_obj[indivial_i,:] = [23. 7. 90. 97.]
88 cord_individual_obj[indivial_i,:] = [24. 8. 86. 94.]
89
90 min(cord_individual_obj[:,3]) = 51.0
91 historl_G_best_iter[iter, 3] = 51.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 9. 45. 54.]
96 cord_individual_obj[indivial_i,:] = [ 1. 7. 129. 136.]
97 cord_individual_obj[indivial_i,:] = [ 2. 11. 74. 85.]
98 cord_individual_obj[indivial_i,:] = [ 3. 6. 72. 78.]
99 cord_individual_obj[indivial_i,:] = [ 4. 6. 74. 80.]
100 cord_individual_obj[indivial_i,:] = [ 5. 7. 95. 102.]
101 cord_individual_obj[indivial_i,:] = [ 6. 7. 96. 103.]
102 cord_individual_obj[indivial_i,:] = [ 7. 8. 124. 132.]
103 cord_individual_obj[indivial_i,:] = [ 8. 7. 44. 51.]
104 cord_individual_obj[indivial_i,:] = [ 9. 8. 83. 91.]
105 cord_individual_obj[indivial_i,:] = [10. 7. 109. 116.]
106 cord_individual_obj[indivial_i,:] = [11. 8. 114. 122.]
107 cord_individual_obj[indivial_i,:] = [12. 7. 90. 97.]
108 cord_individual_obj[indivial_i,:] = [13. 8. 94. 102.]
109 cord_individual_obj[indivial_i,:] = [14. 9. 85. 94.]
110 cord_individual_obj[indivial_i,:] = [15. 8. 74. 82.]
111 cord_individual_obj[indivial_i,:] = [16. 7. 84. 91.]
112 cord_individual_obj[indivial_i,:] = [17. 7. 89. 96.]
113 cord_individual_obj[indivial_i,:] = [18. 7. 106. 113.]
114 cord_individual_obj[indivial_i,:] = [19. 7. 83. 90.]
115 cord_individual_obj[indivial_i,:] = [20. 6. 90. 96.]
116 cord_individual_obj[indivial_i,:] = [21. 7. 99. 106.]
117 cord_individual_obj[indivial_i,:] = [22. 8. 84. 92.]
118 cord_individual_obj[indivial_i,:] = [23. 8. 97. 105.]
119 cord_individual_obj[indivial_i,:] = [24. 7. 108. 115.]
120
121 min(cord_individual_obj[:,3]) = 51.0
122 historl_G_best_iter[iter, 3] = 51.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 8. 101. 109.]
127 cord_individual_obj[indivial_i,:] = [ 1. 7. 44. 51.]
128 cord_individual_obj[indivial_i,:] = [ 2. 6. 167. 173.]
129 cord_individual_obj[indivial_i,:] = [ 3. 7. 100. 107.]
130 cord_individual_obj[indivial_i,:] = [ 4. 8. 55. 63.]
131 cord_individual_obj[indivial_i,:] = [ 5. 7. 98. 105.]
132 cord_individual_obj[indivial_i,:] = [ 6. 9. 96. 105.]
133 cord_individual_obj[indivial_i,:] = [ 7. 7. 87. 94.]
134 cord_individual_obj[indivial_i,:] = [ 8. 8. 136. 144.]
135 cord_individual_obj[indivial_i,:] = [ 9. 9. 117. 126.]
136 cord_individual_obj[indivial_i,:] = [10. 9. 65. 74.]
137 cord_individual_obj[indivial_i,:] = [11. 7. 84. 91.]
138 cord_individual_obj[indivial_i,:] = [12. 9. 166. 175.]
139 cord_individual_obj[indivial_i,:] = [13. 7. 91. 98.]
140 cord_individual_obj[indivial_i,:] = [14. 7. 95. 102.]
141 cord_individual_obj[indivial_i,:] = [15. 8. 80. 88.]
142 cord_individual_obj[indivial_i,:] = [16. 8. 102. 110.]
143 cord_individual_obj[indivial_i,:] = [17. 8. 110. 118.]
144 cord_individual_obj[indivial_i,:] = [18. 6. 82. 88.]
145 cord_individual_obj[indivial_i,:] = [19. 9. 90. 99.]
146 cord_individual_obj[indivial_i,:] = [20. 6. 90. 96.]
147 cord_individual_obj[indivial_i,:] = [21. 8. 100. 108.]
148 cord_individual_obj[indivial_i,:] = [22. 7. 56. 63.]
149 cord_individual_obj[indivial_i,:] = [23. 7. 82. 89.]
150 cord_individual_obj[indivial_i,:] = [24. 10. 87. 97.]
151
152 min(cord_individual_obj[:,3]) = 51.0
153 historl_G_best_iter[iter, 3] = 51.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 8. 115. 123.]
158 cord_individual_obj[indivial_i,:] = [ 1. 7. 88. 95.]
159 cord_individual_obj[indivial_i,:] = [ 2. 9. 119. 128.]
160 cord_individual_obj[indivial_i,:] = [ 3. 6. 90. 96.]
161 cord_individual_obj[indivial_i,:] = [ 4. 8. 58. 66.]
162 cord_individual_obj[indivial_i,:] = [ 5. 9. 154. 163.]
163 cord_individual_obj[indivial_i,:] = [ 6. 8. 104. 112.]

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164 cord_individual_obj[indivial_i,:] = [ 7. 7. 113. 120.]
165 cord_individual_obj[indivial_i,:] = [ 8. 6. 166. 172.]
166 cord_individual_obj[indivial_i,:] = [ 9. 8. 92. 100.]
167 cord_individual_obj[indivial_i,:] = [10. 8. 138. 146.]
168 cord_individual_obj[indivial_i,:] = [11. 9. 103. 112.]
169 cord_individual_obj[indivial_i,:] = [12. 7. 44. 51.]
170 cord_individual_obj[indivial_i,:] = [13. 8. 99. 107.]
171 cord_individual_obj[indivial_i,:] = [14. 8. 92. 100.]
172 cord_individual_obj[indivial_i,:] = [15. 8. 82. 90.]
173 cord_individual_obj[indivial_i,:] = [16. 7. 95. 102.]
174 cord_individual_obj[indivial_i,:] = [17. 7. 125. 132.]
175 cord_individual_obj[indivial_i,:] = [18. 8. 93. 101.]
176 cord_individual_obj[indivial_i,:] = [19. 8. 145. 153.]
177 cord_individual_obj[indivial_i,:] = [20. 7. 102. 109.]
178 cord_individual_obj[indivial_i,:] = [21. 8. 78. 86.]
179 cord_individual_obj[indivial_i,:] = [22. 8. 92. 100.]
180 cord_individual_obj[indivial_i,:] = [23. 10. 133. 143.]
181 cord_individual_obj[indivial_i,:] = [24. 10. 78. 88.]
182
183 min(cord_individual_obj[:,3]) = 51.0
184 historl_G_best_iter[iter,3] = 51.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i,:] = [ 0. 9. 142. 151.]
189 cord_individual_obj[indivial_i,:] = [ 1. 7. 103. 110.]
190 cord_individual_obj[indivial_i,:] = [ 2. 8. 142. 150.]
191 cord_individual_obj[indivial_i,:] = [ 3. 8. 116. 124.]
192 cord_individual_obj[indivial_i,:] = [ 4. 8. 62. 70.]
193 cord_individual_obj[indivial_i,:] = [ 5. 8. 113. 121.]
194 cord_individual_obj[indivial_i,:] = [ 6. 7. 95. 102.]
195 cord_individual_obj[indivial_i,:] = [ 7. 8. 87. 95.]
196 cord_individual_obj[indivial_i,:] = [ 8. 7. 44. 51.]
197 cord_individual_obj[indivial_i,:] = [ 9. 7. 131. 138.]
198 cord_individual_obj[indivial_i,:] = [10. 8. 54. 62.]
199 cord_individual_obj[indivial_i,:] = [11. 9. 83. 92.]
200 cord_individual_obj[indivial_i,:] = [12. 7. 100. 107.]
201 cord_individual_obj[indivial_i,:] = [13. 8. 148. 156.]
202 cord_individual_obj[indivial_i,:] = [14. 9. 122. 131.]
203 cord_individual_obj[indivial_i,:] = [15. 10. 82. 92.]
204 cord_individual_obj[indivial_i,:] = [16. 8. 88. 96.]
205 cord_individual_obj[indivial_i,:] = [17. 8. 90. 98.]
206 cord_individual_obj[indivial_i,:] = [18. 8. 106. 114.]
207 cord_individual_obj[indivial_i,:] = [19. 8. 83. 91.]
208 cord_individual_obj[indivial_i,:] = [20. 7. 60. 67.]
209 cord_individual_obj[indivial_i,:] = [21. 8. 127. 135.]
210 cord_individual_obj[indivial_i,:] = [22. 9. 109. 118.]
211 cord_individual_obj[indivial_i,:] = [23. 7. 96. 103.]
212 cord_individual_obj[indivial_i,:] = [24. 7. 119. 126.]
213
214 min(cord_individual_obj[:,3]) = 51.0
215 historl_G_best_iter[iter,3] = 51.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i,:] = [ 0. 8. 91. 99.]
220 cord_individual_obj[indivial_i,:] = [ 1. 7. 81. 88.]
221 cord_individual_obj[indivial_i,:] = [ 2. 8. 100. 108.]
222 cord_individual_obj[indivial_i,:] = [ 3. 6. 86. 92.]
223 cord_individual_obj[indivial_i,:] = [ 4. 8. 68. 76.]
224 cord_individual_obj[indivial_i,:] = [ 5. 7. 111. 118.]
225 cord_individual_obj[indivial_i,:] = [ 6. 8. 101. 109.]
226 cord_individual_obj[indivial_i,:] = [ 7. 8. 109. 117.]
227 cord_individual_obj[indivial_i,:] = [ 8. 7. 142. 149.]
228 cord_individual_obj[indivial_i,:] = [ 9. 7. 96. 103.]
229 cord_individual_obj[indivial_i,:] = [10. 7. 111. 118.]
230 cord_individual_obj[indivial_i,:] = [11. 8. 101. 109.]
231 cord_individual_obj[indivial_i,:] = [12. 7. 140. 147.]
232 cord_individual_obj[indivial_i,:] = [13. 7. 44. 51.]
233 cord_individual_obj[indivial_i,:] = [14. 7. 64. 71.]
234 cord_individual_obj[indivial_i,:] = [15. 9. 130. 139.]
235 cord_individual_obj[indivial_i,:] = [16. 7. 98. 105.]
236 cord_individual_obj[indivial_i,:] = [17. 7. 125. 132.]
237 cord_individual_obj[indivial_i,:] = [18. 7. 84. 91.]
238 cord_individual_obj[indivial_i,:] = [19. 10. 109. 119.]
239 cord_individual_obj[indivial_i,:] = [20. 7. 44. 51.]
240 cord_individual_obj[indivial_i,:] = [21. 8. 89. 97.]
241 cord_individual_obj[indivial_i,:] = [22. 9. 70. 79.]
242 cord_individual_obj[indivial_i,:] = [23. 10. 104. 114.]
243 cord_individual_obj[indivial_i,:] = [24. 8. 73. 81.]
244
245 min(cord_individual_obj[:,3]) = 51.0
246 historl_G_best_iter[iter,3] = 51.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0.  7. 73. 80.]
251 cord_individual_obj[indivial_i, :] = [ 1.  7. 105. 112.]
252 cord_individual_obj[indivial_i, :] = [ 2.  8. 113. 121.]
253 cord_individual_obj[indivial_i, :] = [ 3.  7. 82. 89.]
254 cord_individual_obj[indivial_i, :] = [ 4.  8. 72. 80.]
255 cord_individual_obj[indivial_i, :] = [ 5.  6. 90. 96.]
256 cord_individual_obj[indivial_i, :] = [ 6.  8. 118. 126.]
257 cord_individual_obj[indivial_i, :] = [ 7.  8. 78. 86.]
258 cord_individual_obj[indivial_i, :] = [ 8.  7. 44. 51.]
259 cord_individual_obj[indivial_i, :] = [ 9.  8. 105. 113.]
260 cord_individual_obj[indivial_i, :] = [10.  7. 100. 107.]
261 cord_individual_obj[indivial_i, :] = [11.  7. 88. 95.]
262 cord_individual_obj[indivial_i, :] = [12.  7. 105. 112.]
263 cord_individual_obj[indivial_i, :] = [13.  7. 99. 106.]
264 cord_individual_obj[indivial_i, :] = [14.  8. 103. 111.]
265 cord_individual_obj[indivial_i, :] = [15.  8. 76. 84.]
266 cord_individual_obj[indivial_i, :] = [16.  7. 113. 120.]
267 cord_individual_obj[indivial_i, :] = [17.  7. 40. 47.]
268 cord_individual_obj[indivial_i, :] = [18.  7. 87. 94.]
269 cord_individual_obj[indivial_i, :] = [19.  7. 110. 117.]
270 cord_individual_obj[indivial_i, :] = [20.  6. 100. 106.]
271 cord_individual_obj[indivial_i, :] = [21.  6. 94. 100.]
272 cord_individual_obj[indivial_i, :] = [22.  7. 112. 119.]
273 cord_individual_obj[indivial_i, :] = [23.  7. 71. 78.]
274 cord_individual_obj[indivial_i, :] = [24.  7. 113. 120.]
275

276 min(cord_individual_obj[:, 3]) = 47.0
277 historl_G_best_iter[iter, 3] = 47.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0.  9. 72. 81.]
282 cord_individual_obj[indivial_i, :] = [ 1.  7. 101. 108.]
283 cord_individual_obj[indivial_i, :] = [ 2.  9. 109. 118.]
284 cord_individual_obj[indivial_i, :] = [ 3.  7. 89. 96.]
285 cord_individual_obj[indivial_i, :] = [ 4.  7. 93. 100.]
286 cord_individual_obj[indivial_i, :] = [ 5.  7. 110. 117.]
287 cord_individual_obj[indivial_i, :] = [ 6.  7. 40. 47.]
288 cord_individual_obj[indivial_i, :] = [ 7.  8. 86. 94.]
289 cord_individual_obj[indivial_i, :] = [ 8.  7. 66. 73.]
290 cord_individual_obj[indivial_i, :] = [ 9.  7. 79. 86.]
291 cord_individual_obj[indivial_i, :] = [10.  8. 70. 78.]
292 cord_individual_obj[indivial_i, :] = [11.  6. 139. 145.]
293 cord_individual_obj[indivial_i, :] = [12.  9. 65. 74.]
294 cord_individual_obj[indivial_i, :] = [13.  9. 79. 88.]
295 cord_individual_obj[indivial_i, :] = [14.  9. 88. 97.]
296 cord_individual_obj[indivial_i, :] = [15.  7. 207. 214.]
297 cord_individual_obj[indivial_i, :] = [16.  8. 56. 64.]
298 cord_individual_obj[indivial_i, :] = [17.  7. 93. 100.]
299 cord_individual_obj[indivial_i, :] = [18.  10. 93. 103.]
300 cord_individual_obj[indivial_i, :] = [19.  10. 135. 145.]
301 cord_individual_obj[indivial_i, :] = [20.  6. 83. 89.]
302 cord_individual_obj[indivial_i, :] = [21.  9. 83. 92.]
303 cord_individual_obj[indivial_i, :] = [22.  8. 173. 181.]
304 cord_individual_obj[indivial_i, :] = [23.  7. 94. 101.]
305 cord_individual_obj[indivial_i, :] = [24.  8. 90. 98.]
306

307 min(cord_individual_obj[:, 3]) = 47.0
308 historl_G_best_iter[iter, 3] = 47.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0.  9. 91. 100.]
313 cord_individual_obj[indivial_i, :] = [ 1.  6. 82. 88.]
314 cord_individual_obj[indivial_i, :] = [ 2.  7. 124. 131.]
315 cord_individual_obj[indivial_i, :] = [ 3.  6. 99. 105.]
316 cord_individual_obj[indivial_i, :] = [ 4.  7. 71. 78.]
317 cord_individual_obj[indivial_i, :] = [ 5.  7. 103. 110.]
318 cord_individual_obj[indivial_i, :] = [ 6.  8. 93. 101.]
319 cord_individual_obj[indivial_i, :] = [ 7.  7. 116. 123.]
320 cord_individual_obj[indivial_i, :] = [ 8.  6. 101. 107.]
321 cord_individual_obj[indivial_i, :] = [ 9.  12. 94. 106.]
322 cord_individual_obj[indivial_i, :] = [10.  7. 102. 109.]
323 cord_individual_obj[indivial_i, :] = [11.  6. 87. 93.]
324 cord_individual_obj[indivial_i, :] = [12.  7. 67. 74.]
325 cord_individual_obj[indivial_i, :] = [13.  7. 108. 115.]
326 cord_individual_obj[indivial_i, :] = [14.  6. 108. 114.]
327 cord_individual_obj[indivial_i, :] = [15.  7. 40. 47.]
328 cord_individual_obj[indivial_i, :] = [16.  7. 87. 94.]
329 cord_individual_obj[indivial_i, :] = [17.  8. 123. 131.]
330 cord_individual_obj[indivial_i, :] = [18.  8. 75. 83.]
331 cord_individual_obj[indivial_i, :] = [19.  8. 107. 115.]

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unknown

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332     cord_individual_obj[indivial_i, :] = [20. 6. 90. 96.]
333     cord_individual_obj[indivial_i, :] = [21. 8. 107. 115.]
334     cord_individual_obj[indivial_i, :] = [22. 7. 109. 116.]
335     cord_individual_obj[indivial_i, :] = [23. 9. 74. 83.]
336     cord_individual_obj[indivial_i, :] = [24. 9. 116. 125.]
337
338 min(cord_individual_obj[:, 3]) = 47.0
339 histol_G_best_iter[iter, 3] = 47.0
340 Begin iteration:
341
342 iter = 10
343     cord_individual_obj[indivial_i, :] = [ 0. 8. 85. 93.]
344     cord_individual_obj[indivial_i, :] = [ 1. 7. 90. 97.]
345     cord_individual_obj[indivial_i, :] = [ 2. 7. 40. 47.]
346     cord_individual_obj[indivial_i, :] = [ 3. 6. 83. 89.]
347     cord_individual_obj[indivial_i, :] = [ 4. 9. 106. 115.]
348     cord_individual_obj[indivial_i, :] = [ 5. 7. 159. 166.]
349     cord_individual_obj[indivial_i, :] = [ 6. 6. 78. 84.]
350     cord_individual_obj[indivial_i, :] = [ 7. 8. 140. 148.]
351     cord_individual_obj[indivial_i, :] = [ 8. 8. 172. 180.]
352     cord_individual_obj[indivial_i, :] = [ 9. 7. 162. 169.]
353     cord_individual_obj[indivial_i, :] = [10. 9. 111. 120.]
354     cord_individual_obj[indivial_i, :] = [11. 7. 98. 105.]
355     cord_individual_obj[indivial_i, :] = [12. 8. 75. 83.]
356     cord_individual_obj[indivial_i, :] = [13. 8. 159. 167.]
357     cord_individual_obj[indivial_i, :] = [14. 8. 94. 102.]
358     cord_individual_obj[indivial_i, :] = [15. 8. 90. 98.]
359     cord_individual_obj[indivial_i, :] = [16. 10. 94. 104.]
360     cord_individual_obj[indivial_i, :] = [17. 8. 102. 110.]
361     cord_individual_obj[indivial_i, :] = [18. 9. 86. 95.]
362     cord_individual_obj[indivial_i, :] = [19. 6. 158. 164.]
363     cord_individual_obj[indivial_i, :] = [20. 6. 137. 143.]
364     cord_individual_obj[indivial_i, :] = [21. 6. 75. 81.]
365     cord_individual_obj[indivial_i, :] = [22. 6. 147. 153.]
366     cord_individual_obj[indivial_i, :] = [23. 7. 137. 144.]
367     cord_individual_obj[indivial_i, :] = [24. 8. 112. 120.]
368
369 min(cord_individual_obj[:, 3]) = 47.0
370 histol_G_best_iter[iter, 3] = 47.0
371 Begin iteration:
372
373 iter = 11
374     cord_individual_obj[indivial_i, :] = [ 0. 8. 113. 121.]
375     cord_individual_obj[indivial_i, :] = [ 1. 9. 98. 107.]
376     cord_individual_obj[indivial_i, :] = [ 2. 8. 81. 89.]
377     cord_individual_obj[indivial_i, :] = [ 3. 7. 100. 107.]
378     cord_individual_obj[indivial_i, :] = [ 4. 8. 80. 88.]
379     cord_individual_obj[indivial_i, :] = [ 5. 8. 62. 70.]
380     cord_individual_obj[indivial_i, :] = [ 6. 8. 108. 116.]
381     cord_individual_obj[indivial_i, :] = [ 7. 7. 110. 117.]
382     cord_individual_obj[indivial_i, :] = [ 8. 7. 40. 47.]
383     cord_individual_obj[indivial_i, :] = [ 9. 7. 99. 106.]
384     cord_individual_obj[indivial_i, :] = [10. 10. 130. 140.]
385     cord_individual_obj[indivial_i, :] = [11. 7. 56. 63.]
386     cord_individual_obj[indivial_i, :] = [12. 9. 110. 119.]
387     cord_individual_obj[indivial_i, :] = [13. 7. 177. 184.]
388     cord_individual_obj[indivial_i, :] = [14. 9. 130. 139.]
389     cord_individual_obj[indivial_i, :] = [15. 7. 143. 150.]
390     cord_individual_obj[indivial_i, :] = [16. 8. 86. 94.]
391     cord_individual_obj[indivial_i, :] = [17. 8. 149. 157.]
392     cord_individual_obj[indivial_i, :] = [18. 7. 159. 166.]
393     cord_individual_obj[indivial_i, :] = [19. 10. 94. 104.]
394     cord_individual_obj[indivial_i, :] = [20. 8. 112. 120.]
395     cord_individual_obj[indivial_i, :] = [21. 7. 101. 108.]
396     cord_individual_obj[indivial_i, :] = [22. 7. 122. 129.]
397     cord_individual_obj[indivial_i, :] = [23. 8. 173. 181.]
398     cord_individual_obj[indivial_i, :] = [24. 7. 107. 114.]
399
400 min(cord_individual_obj[:, 3]) = 47.0
401 histol_G_best_iter[iter, 3] = 47.0
402 Begin iteration:
403
404 iter = 12
405     cord_individual_obj[indivial_i, :] = [ 0. 7. 128. 135.]
406     cord_individual_obj[indivial_i, :] = [ 1. 6. 82. 88.]
407     cord_individual_obj[indivial_i, :] = [ 2. 6. 97. 103.]
408     cord_individual_obj[indivial_i, :] = [ 3. 6. 73. 79.]
409     cord_individual_obj[indivial_i, :] = [ 4. 8. 70. 78.]
410     cord_individual_obj[indivial_i, :] = [ 5. 8. 85. 93.]
411     cord_individual_obj[indivial_i, :] = [ 6. 7. 114. 121.]
412     cord_individual_obj[indivial_i, :] = [ 7. 7. 99. 106.]
413     cord_individual_obj[indivial_i, :] = [ 8. 7. 106. 113.]
414     cord_individual_obj[indivial_i, :] = [ 9. 8. 174. 182.]
415     cord_individual_obj[indivial_i, :] = [10. 8. 56. 64.]
```

```

416 cord_individual_obj[indivial_i,:] = [ 11. 10. 90. 100.]
417 cord_individual_obj[indivial_i,:] = [12. 7. 46. 53.]
418 cord_individual_obj[indivial_i,:] = [13. 7. 40. 47.]
419 cord_individual_obj[indivial_i,:] = [14. 8. 66. 74.]
420 cord_individual_obj[indivial_i,:] = [ 15. 8. 99. 107.]
421 cord_individual_obj[indivial_i,:] = [ 16. 7. 94. 101.]
422 cord_individual_obj[indivial_i,:] = [17. 6. 74. 80.]
423 cord_individual_obj[indivial_i,:] = [18. 9. 56. 65.]
424 cord_individual_obj[indivial_i,:] = [19. 8. 90. 98.]
425 cord_individual_obj[indivial_i,:] = [20. 7. 98. 105.]
426 cord_individual_obj[indivial_i,:] = [21. 9. 75. 84.]
427 cord_individual_obj[indivial_i,:] = [22. 6. 95. 101.]
428 cord_individual_obj[indivial_i,:] = [23. 8. 104. 112.]
429 cord_individual_obj[indivial_i,:] = [24. 7. 114. 121.]
430
431 min(cord_individual_obj[:,3]) = 47.0
432 histol_G_best_iter[iter,3] = 47.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [ 0. 9. 68. 77.]
437 cord_individual_obj[indivial_i,:] = [ 1. 8. 83. 91.]
438 cord_individual_obj[indivial_i,:] = [ 2. 7. 115. 122.]
439 cord_individual_obj[indivial_i,:] = [ 3. 7. 96. 103.]
440 cord_individual_obj[indivial_i,:] = [ 4. 7. 66. 73.]
441 cord_individual_obj[indivial_i,:] = [ 5. 6. 47. 53.]
442 cord_individual_obj[indivial_i,:] = [ 6. 8. 77. 85.]
443 cord_individual_obj[indivial_i,:] = [ 7. 7. 131. 138.]
444 cord_individual_obj[indivial_i,:] = [ 8. 7. 101. 108.]
445 cord_individual_obj[indivial_i,:] = [ 9. 7. 40. 47.]
446 cord_individual_obj[indivial_i,:] = [10. 8. 122. 130.]
447 cord_individual_obj[indivial_i,:] = [11. 6. 137. 143.]
448 cord_individual_obj[indivial_i,:] = [12. 6. 93. 99.]
449 cord_individual_obj[indivial_i,:] = [13. 8. 87. 95.]
450 cord_individual_obj[indivial_i,:] = [14. 7. 85. 92.]
451 cord_individual_obj[indivial_i,:] = [15. 9. 104. 113.]
452 cord_individual_obj[indivial_i,:] = [16. 9. 93. 102.]
453 cord_individual_obj[indivial_i,:] = [17. 8. 87. 95.]
454 cord_individual_obj[indivial_i,:] = [18. 7. 74. 81.]
455 cord_individual_obj[indivial_i,:] = [19. 8. 149. 157.]
456 cord_individual_obj[indivial_i,:] = [20. 6. 100. 106.]
457 cord_individual_obj[indivial_i,:] = [21. 8. 89. 97.]
458 cord_individual_obj[indivial_i,:] = [22. 8. 143. 151.]
459 cord_individual_obj[indivial_i,:] = [23. 8. 73. 81.]
460 cord_individual_obj[indivial_i,:] = [24. 8. 61. 69.]
461
462 min(cord_individual_obj[:,3]) = 47.0
463 histol_G_best_iter[iter,3] = 47.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [ 0. 8. 89. 97.]
468 cord_individual_obj[indivial_i,:] = [ 1. 7. 103. 110.]
469 cord_individual_obj[indivial_i,:] = [ 2. 8. 129. 137.]
470 cord_individual_obj[indivial_i,:] = [ 3. 8. 65. 73.]
471 cord_individual_obj[indivial_i,:] = [ 4. 7. 112. 119.]
472 cord_individual_obj[indivial_i,:] = [ 5. 7. 71. 78.]
473 cord_individual_obj[indivial_i,:] = [ 6. 8. 108. 116.]
474 cord_individual_obj[indivial_i,:] = [ 7. 7. 126. 133.]
475 cord_individual_obj[indivial_i,:] = [ 8. 9. 90. 99.]
476 cord_individual_obj[indivial_i,:] = [ 9. 7. 140. 147.]
477 cord_individual_obj[indivial_i,:] = [10. 8. 161. 169.]
478 cord_individual_obj[indivial_i,:] = [11. 8. 94. 102.]
479 cord_individual_obj[indivial_i,:] = [12. 8. 63. 71.]
480 cord_individual_obj[indivial_i,:] = [13. 8. 152. 160.]
481 cord_individual_obj[indivial_i,:] = [14. 7. 90. 97.]
482 cord_individual_obj[indivial_i,:] = [15. 10. 122. 132.]
483 cord_individual_obj[indivial_i,:] = [16. 8. 78. 86.]
484 cord_individual_obj[indivial_i,:] = [17. 8. 84. 92.]
485 cord_individual_obj[indivial_i,:] = [18. 10. 101. 111.]
486 cord_individual_obj[indivial_i,:] = [19. 7. 40. 47.]
487 cord_individual_obj[indivial_i,:] = [20. 7. 101. 108.]
488 cord_individual_obj[indivial_i,:] = [21. 8. 95. 103.]
489 cord_individual_obj[indivial_i,:] = [22. 8. 152. 160.]
490 cord_individual_obj[indivial_i,:] = [23. 10. 125. 135.]
491 cord_individual_obj[indivial_i,:] = [24. 8. 139. 147.]
492
493 min(cord_individual_obj[:,3]) = 47.0
494 histol_G_best_iter[iter,3] = 47.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [ 0. 8. 91. 99.]
499 cord_individual_obj[indivial_i,:] = [ 1. 8. 76. 84.]

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500 cord_individual_obj[indivial_i,:] = [ 2. 8. 114. 122.]
501 cord_individual_obj[indivial_i,:] = [ 3. 6. 82. 88.]
502 cord_individual_obj[indivial_i,:] = [ 4. 9. 62. 71.]
503 cord_individual_obj[indivial_i,:] = [ 5. 8. 81. 89.]
504 cord_individual_obj[indivial_i,:] = [ 6. 7. 125. 132.]
505 cord_individual_obj[indivial_i,:] = [ 7. 8. 162. 170.]
506 cord_individual_obj[indivial_i,:] = [ 8. 9. 154. 163.]
507 cord_individual_obj[indivial_i,:] = [ 9. 8. 165. 173.]
508 cord_individual_obj[indivial_i,:] = [10. 7. 40. 47.]
509 cord_individual_obj[indivial_i,:] = [11. 7. 79. 86.]
510 cord_individual_obj[indivial_i,:] = [12. 8. 136. 144.]
511 cord_individual_obj[indivial_i,:] = [13. 8. 145. 153.]
512 cord_individual_obj[indivial_i,:] = [14. 11. 153. 164.]
513 cord_individual_obj[indivial_i,:] = [15. 8. 164. 172.]
514 cord_individual_obj[indivial_i,:] = [16. 9. 156. 165.]
515 cord_individual_obj[indivial_i,:] = [17. 8. 109. 117.]
516 cord_individual_obj[indivial_i,:] = [18. 7. 138. 145.]
517 cord_individual_obj[indivial_i,:] = [19. 9. 121. 130.]
518 cord_individual_obj[indivial_i,:] = [20. 6. 104. 110.]
519 cord_individual_obj[indivial_i,:] = [21. 6. 58. 64.]
520 cord_individual_obj[indivial_i,:] = [22. 6. 48. 54.]
521 cord_individual_obj[indivial_i,:] = [23. 7. 142. 149.]
522 cord_individual_obj[indivial_i,:] = [24. 9. 73. 82.]
523
524 min(cord_individual_obj[:, 3]) = 47.0
525 histol_G_best_iter[iter, 3] = 47.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i,:] = [ 0. 8. 89. 97.]
530 cord_individual_obj[indivial_i,:] = [ 1. 6. 94. 100.]
531 cord_individual_obj[indivial_i,:] = [ 2. 8. 104. 112.]
532 cord_individual_obj[indivial_i,:] = [ 3. 8. 68. 76.]
533 cord_individual_obj[indivial_i,:] = [ 4. 8. 88. 96.]
534 cord_individual_obj[indivial_i,:] = [ 5. 7. 51. 58.]
535 cord_individual_obj[indivial_i,:] = [ 6. 8. 88. 96.]
536 cord_individual_obj[indivial_i,:] = [ 7. 8. 105. 113.]
537 cord_individual_obj[indivial_i,:] = [ 8. 9. 75. 84.]
538 cord_individual_obj[indivial_i,:] = [ 9. 7. 40. 47.]
539 cord_individual_obj[indivial_i,:] = [10. 9. 85. 94.]
540 cord_individual_obj[indivial_i,:] = [11. 7. 89. 96.]
541 cord_individual_obj[indivial_i,:] = [12. 8. 72. 80.]
542 cord_individual_obj[indivial_i,:] = [13. 8. 61. 69.]
543 cord_individual_obj[indivial_i,:] = [14. 7. 62. 69.]
544 cord_individual_obj[indivial_i,:] = [15. 8. 94. 102.]
545 cord_individual_obj[indivial_i,:] = [16. 7. 68. 75.]
546 cord_individual_obj[indivial_i,:] = [17. 8. 63. 71.]
547 cord_individual_obj[indivial_i,:] = [18. 7. 97. 104.]
548 cord_individual_obj[indivial_i,:] = [19. 9. 79. 88.]
549 cord_individual_obj[indivial_i,:] = [20. 8. 97. 105.]
550 cord_individual_obj[indivial_i,:] = [21. 6. 98. 104.]
551 cord_individual_obj[indivial_i,:] = [22. 8. 71. 79.]
552 cord_individual_obj[indivial_i,:] = [23. 8. 134. 142.]
553 cord_individual_obj[indivial_i,:] = [24. 9. 96. 105.]
554
555 min(cord_individual_obj[:, 3]) = 47.0
556 histol_G_best_iter[iter, 3] = 47.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i,:] = [ 0. 7. 81. 88.]
561 cord_individual_obj[indivial_i,:] = [ 1. 8. 78. 86.]
562 cord_individual_obj[indivial_i,:] = [ 2. 10. 123. 133.]
563 cord_individual_obj[indivial_i,:] = [ 3. 9. 134. 143.]
564 cord_individual_obj[indivial_i,:] = [ 4. 9. 64. 73.]
565 cord_individual_obj[indivial_i,:] = [ 5. 7. 55. 62.]
566 cord_individual_obj[indivial_i,:] = [ 6. 7. 118. 125.]
567 cord_individual_obj[indivial_i,:] = [ 7. 7. 86. 93.]
568 cord_individual_obj[indivial_i,:] = [ 8. 7. 64. 71.]
569 cord_individual_obj[indivial_i,:] = [ 9. 6. 139. 145.]
570 cord_individual_obj[indivial_i,:] = [10. 7. 111. 118.]
571 cord_individual_obj[indivial_i,:] = [11. 9. 121. 130.]
572 cord_individual_obj[indivial_i,:] = [12. 8. 156. 164.]
573 cord_individual_obj[indivial_i,:] = [13. 9. 129. 138.]
574 cord_individual_obj[indivial_i,:] = [14. 8. 44. 52.]
575 cord_individual_obj[indivial_i,:] = [15. 8. 106. 114.]
576 cord_individual_obj[indivial_i,:] = [16. 7. 84. 91.]
577 cord_individual_obj[indivial_i,:] = [17. 7. 130. 137.]
578 cord_individual_obj[indivial_i,:] = [18. 8. 62. 70.]
579 cord_individual_obj[indivial_i,:] = [19. 9. 124. 133.]
580 cord_individual_obj[indivial_i,:] = [20. 7. 86. 93.]
581 cord_individual_obj[indivial_i,:] = [21. 9. 70. 79.]
582 cord_individual_obj[indivial_i,:] = [22. 7. 140. 147.]
583 cord_individual_obj[indivial_i,:] = [23. 7. 40. 47.]

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584     cord_individual_obj[indivial_i, :] = [24. 7. 75. 82.]
585
586     min(cord_individual_obj[:, 3]) = 47.0
587     historl_G_best_iter[iter, 3] = 47.0
588 Begin iteration:
589
590 iter = 18
591     cord_individual_obj[indivial_i, :] = [ 0. 9. 71. 80.]
592     cord_individual_obj[indivial_i, :] = [ 1. 7. 85. 92.]
593     cord_individual_obj[indivial_i, :] = [ 2. 8. 68. 76.]
594     cord_individual_obj[indivial_i, :] = [ 3. 7. 94. 101.]
595     cord_individual_obj[indivial_i, :] = [ 4. 6. 66. 72.]
596     cord_individual_obj[indivial_i, :] = [ 5. 6. 104. 110.]
597     cord_individual_obj[indivial_i, :] = [ 6. 8. 176. 184.]
598     cord_individual_obj[indivial_i, :] = [ 7. 7. 84. 91.]
599     cord_individual_obj[indivial_i, :] = [ 8. 8. 106. 114.]
600     cord_individual_obj[indivial_i, :] = [ 9. 8. 102. 110.]
601     cord_individual_obj[indivial_i, :] = [10. 8. 114. 122.]
602     cord_individual_obj[indivial_i, :] = [11. 7. 154. 161.]
603     cord_individual_obj[indivial_i, :] = [12. 7. 40. 47.]
604     cord_individual_obj[indivial_i, :] = [13. 7. 94. 101.]
605     cord_individual_obj[indivial_i, :] = [14. 7. 87. 94.]
606     cord_individual_obj[indivial_i, :] = [15. 7. 101. 108.]
607     cord_individual_obj[indivial_i, :] = [16. 8. 87. 95.]
608     cord_individual_obj[indivial_i, :] = [17. 7. 96. 103.]
609     cord_individual_obj[indivial_i, :] = [18. 10. 102. 112.]
610     cord_individual_obj[indivial_i, :] = [19. 7. 93. 100.]
611     cord_individual_obj[indivial_i, :] = [20. 7. 86. 93.]
612     cord_individual_obj[indivial_i, :] = [21. 8. 107. 115.]
613     cord_individual_obj[indivial_i, :] = [22. 7. 131. 138.]
614     cord_individual_obj[indivial_i, :] = [23. 7. 81. 88.]
615     cord_individual_obj[indivial_i, :] = [24. 9. 93. 102.]
616
617     min(cord_individual_obj[:, 3]) = 47.0
618     historl_G_best_iter[iter, 3] = 47.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0. 9. 114. 123.]
623     cord_individual_obj[indivial_i, :] = [ 1. 10. 77. 87.]
624     cord_individual_obj[indivial_i, :] = [ 2. 8. 110. 118.]
625     cord_individual_obj[indivial_i, :] = [ 3. 6. 106. 112.]
626     cord_individual_obj[indivial_i, :] = [ 4. 7. 66. 73.]
627     cord_individual_obj[indivial_i, :] = [ 5. 8. 62. 70.]
628     cord_individual_obj[indivial_i, :] = [ 6. 7. 40. 47.]
629     cord_individual_obj[indivial_i, :] = [ 7. 7. 87. 94.]
630     cord_individual_obj[indivial_i, :] = [ 8. 8. 116. 124.]
631     cord_individual_obj[indivial_i, :] = [ 9. 8. 96. 104.]
632     cord_individual_obj[indivial_i, :] = [10. 9. 107. 116.]
633     cord_individual_obj[indivial_i, :] = [11. 6. 115. 121.]
634     cord_individual_obj[indivial_i, :] = [12. 8. 59. 67.]
635     cord_individual_obj[indivial_i, :] = [13. 6. 71. 77.]
636     cord_individual_obj[indivial_i, :] = [14. 8. 83. 91.]
637     cord_individual_obj[indivial_i, :] = [15. 9. 105. 114.]
638     cord_individual_obj[indivial_i, :] = [16. 7. 113. 120.]
639     cord_individual_obj[indivial_i, :] = [17. 9. 191. 200.]
640     cord_individual_obj[indivial_i, :] = [18. 7. 74. 81.]
641     cord_individual_obj[indivial_i, :] = [19. 8. 73. 81.]
642     cord_individual_obj[indivial_i, :] = [20. 7. 98. 105.]
643     cord_individual_obj[indivial_i, :] = [21. 7. 47. 54.]
644     cord_individual_obj[indivial_i, :] = [22. 7. 80. 87.]
645     cord_individual_obj[indivial_i, :] = [23. 7. 85. 92.]
646     cord_individual_obj[indivial_i, :] = [24. 10. 68. 78.]
647
648     min(cord_individual_obj[:, 3]) = 47.0
649     historl_G_best_iter[iter, 3] = 47.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0. 8. 133. 141.]
654     cord_individual_obj[indivial_i, :] = [ 1. 8. 92. 100.]
655     cord_individual_obj[indivial_i, :] = [ 2. 7. 89. 96.]
656     cord_individual_obj[indivial_i, :] = [ 3. 6. 90. 96.]
657     cord_individual_obj[indivial_i, :] = [ 4. 9. 51. 60.]
658     cord_individual_obj[indivial_i, :] = [ 5. 8. 165. 173.]
659     cord_individual_obj[indivial_i, :] = [ 6. 8. 142. 150.]
660     cord_individual_obj[indivial_i, :] = [ 7. 6. 72. 78.]
661     cord_individual_obj[indivial_i, :] = [ 8. 6. 109. 115.]
662     cord_individual_obj[indivial_i, :] = [ 9. 7. 127. 134.]
663     cord_individual_obj[indivial_i, :] = [10. 7. 55. 62.]
664     cord_individual_obj[indivial_i, :] = [11. 7. 126. 133.]
665     cord_individual_obj[indivial_i, :] = [12. 9. 119. 128.]
666     cord_individual_obj[indivial_i, :] = [13. 7. 145. 152.]
667     cord_individual_obj[indivial_i, :] = [14. 7. 147. 154.]

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668 cord_individual_obj[indivial_i,:] = [ 15. 6. 208. 214.]
669 cord_individual_obj[indivial_i,:] = [ 16. 12. 101. 113.]
670 cord_individual_obj[indivial_i,:] = [17. 7. 40. 47.]
671 cord_individual_obj[indivial_i,:] = [ 18. 8. 105. 113.]
672 cord_individual_obj[indivial_i,:] = [ 19. 6. 105. 111.]
673 cord_individual_obj[indivial_i,:] = [ 20. 7. 121. 128.]
674 cord_individual_obj[indivial_i,:] = [21. 7. 75. 82.]
675 cord_individual_obj[indivial_i,:] = [22. 7. 56. 63.]
676 cord_individual_obj[indivial_i,:] = [ 23. 9. 118. 127.]
677 cord_individual_obj[indivial_i,:] = [ 24. 8. 99. 107.]
678
679 min(cord_individual_obj[:,3]) = 47.0
680 historl_G_best_iter[iter,3] = 47.0
681 Iteration calculate over
682
683
684
685
686 All item are in Bin and:
687 Bin area = 1080
688 Real_area = 158.0
689 Proportion_of_area = 0.14629629629629629
690 BEST_CHROM =
691 berth: [23.5 16.5 24. 23.5 15.5 8.5 7. 10. 1.5 4.5 4.5 1.5 14. ]
692 time: [0. 4. 2. 5. 0. 1. 0. 4. 0. 1. 3. 3. 2.]
693 num_QC: [3. 2. 2. 4. 4. 3. 5. 5. 1. 3. 2. 2. 4.]
694 Objective function values and some other indicators:
695 Obj0 = 7.00 Obj1 = 40.00 Obj0 + Obj1 = 47.00
696 Total movement of crane: 0.00
697 Total waiting time in berth position: 25.00
698 Total index of q during berthing: 849.00
699 Specific arrangement for each vessel:
700 V_id: 0 li: 7.0 xi: 23.5 bow of i: 20.0 tail of i: 27.0 gama_i0: 0.0 gama_i1: 1
701 .0 gama_i1 + 1: 2.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work
702 load_i: 120.0 work load gap_i: 0
703 V_id: 1 li: 5.0 xi: 16.5 bow of i: 14.0 tail of i: 19.0 gama_i0: 4.0 gama_i1: 7
704 .0 gama_i1 + 1: 8.0 gama_i1 - gama_i0: 3.0 duration_time_i: 4.0 demand_i: 160.0 work
705 load_i: 160.0 work load gap_i: 0
706 V_id: 2 li: 8.0 xi: 24.0 bow of i: 20.0 tail of i: 28.0 gama_i0: 2.0 gama_i1: 4
707 .0 gama_i1 + 1: 5.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 120.0 work
708 load_i: 120.0 work load gap_i: 0
709 V_id: 3 li: 9.0 xi: 23.5 bow of i: 19.0 tail of i: 28.0 gama_i0: 5.0 gama_i1: 6
710 .0 gama_i1 + 1: 7.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 160.0 work
711 load_i: 160.0 work load gap_i: 0
712 V_id: 4 li: 9.0 xi: 15.5 bow of i: 11.0 tail of i: 20.0 gama_i0: 0.0 gama_i1: 1
713 .0 gama_i1 + 1: 2.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work
714 load_i: 120.0 work load gap_i: 0
715 V_id: 5 li: 5.0 xi: 8.5 bow of i: 6.0 tail of i: 11.0 gama_i0: 1.0 gama_i1: 3.0
716 .0 gama_i1 + 1: 4.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 140.0 work load_i:
717 140.0 work load gap_i: 0
718 V_id: 6 li: 8.0 xi: 7.0 bow of i: 3.0 tail of i: 11.0 gama_i0: 0.0 gama_i1: 0
719 .0 gama_i1 + 1: 1.0 gama_i1 - gama_i0: 0.0 duration_time_i: 1.0 demand_i: 100.0 work load_i:
720 100.0 work load gap_i: 0
721 V_id: 7 li: 8.0 xi: 10.0 bow of i: 6.0 tail of i: 14.0 gama_i0: 4.0 gama_i1: 5
722 .0 gama_i1 + 1: 6.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 140.0 work
723 load_i: 140.0 work load gap_i: 0
724 V_id: 8 li: 3.0 xi: 1.5 bow of i: 0.0 tail of i: 3.0 gama_i0: 0.0 gama_i1: 2.0
725 .0 gama_i1 + 1: 3.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 60.0 work load_i:
726 60.0 work load gap_i: 0
727 V_id: 9 li: 3.0 xi: 4.5 bow of i: 3.0 tail of i: 6.0 gama_i0: 1.0 gama_i1: 2.0
728 .0 gama_i1 + 1: 3.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work load_i:
729 120.0 work load gap_i: 0
730 V_id: 10 li: 3.0 xi: 4.5 bow of i: 3.0 tail of i: 6.0 gama_i0: 3.0 gama_i1: 5.0
731 .0 gama_i1 + 1: 6.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 120.0 work load_i:
732 120.0 work load gap_i: 0
733 V_id: 11 li: 3.0 xi: 1.5 bow of i: 0.0 tail of i: 3.0 gama_i0: 3.0 gama_i1: 5.0
734 .0 gama_i1 + 1: 6.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 120.0 work load_i:
735 120.0 work load gap_i: 0
736 V_id: 12 li: 6.0 xi: 14.0 bow of i: 11.0 tail of i: 17.0 gama_i0: 2.0 gama_i1:
737 : 3.0 gama_i1 + 1: 4.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work
738 load_i: 120.0 work load gap_i: 0
739
740 Algorithm finished and the total CPU time: 343 s
741 End
742
743

```