

unknown

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80 cord_individual_obj[indivial_i,:] = [ 16. 9. 101. 110.]
81 cord_individual_obj[indivial_i,:] = [ 17. 8. 106. 114.]
82 cord_individual_obj[indivial_i,:] = [18. 9. 70. 79.]
83 cord_individual_obj[indivial_i,:] = [19. 7. 110. 117.]
84 cord_individual_obj[indivial_i,:] = [20. 8. 68. 76.]
85 cord_individual_obj[indivial_i,:] = [21. 9. 60. 69.]
86 cord_individual_obj[indivial_i,:] = [22. 9. 73. 82.]
87 cord_individual_obj[indivial_i,:] = [23. 8. 71. 79.]
88 cord_individual_obj[indivial_i,:] = [24. 10. 76. 86.]
89
90 min(cord_individual_obj[:,3]) = 62.0
91 historl_G_best_iter[iter, 3] = 62.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 11. 125. 136.]
96 cord_individual_obj[indivial_i,:] = [ 1. 9. 107. 116.]
97 cord_individual_obj[indivial_i,:] = [ 2. 10. 86. 96.]
98 cord_individual_obj[indivial_i,:] = [ 3. 7. 55. 62.]
99 cord_individual_obj[indivial_i,:] = [ 4. 9. 100. 109.]
100 cord_individual_obj[indivial_i,:] = [ 5. 8. 109. 117.]
101 cord_individual_obj[indivial_i,:] = [ 6. 9. 114. 123.]
102 cord_individual_obj[indivial_i,:] = [ 7. 8. 72. 80.]
103 cord_individual_obj[indivial_i,:] = [ 8. 9. 107. 116.]
104 cord_individual_obj[indivial_i,:] = [ 9. 9. 91. 100.]
105 cord_individual_obj[indivial_i,:] = [10. 7. 111. 118.]
106 cord_individual_obj[indivial_i,:] = [11. 10. 94. 104.]
107 cord_individual_obj[indivial_i,:] = [12. 10. 75. 85.]
108 cord_individual_obj[indivial_i,:] = [13. 7. 123. 130.]
109 cord_individual_obj[indivial_i,:] = [14. 10. 123. 133.]
110 cord_individual_obj[indivial_i,:] = [15. 10. 123. 133.]
111 cord_individual_obj[indivial_i,:] = [16. 8. 89. 97.]
112 cord_individual_obj[indivial_i,:] = [17. 7. 94. 101.]
113 cord_individual_obj[indivial_i,:] = [18. 9. 83. 92.]
114 cord_individual_obj[indivial_i,:] = [19. 8. 96. 104.]
115 cord_individual_obj[indivial_i,:] = [20. 9. 110. 119.]
116 cord_individual_obj[indivial_i,:] = [21. 10. 99. 109.]
117 cord_individual_obj[indivial_i,:] = [22. 10. 147. 157.]
118 cord_individual_obj[indivial_i,:] = [23. 7. 85. 92.]
119 cord_individual_obj[indivial_i,:] = [24. 9. 78. 87.]
120
121 min(cord_individual_obj[:,3]) = 62.0
122 historl_G_best_iter[iter, 3] = 62.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 8. 95. 103.]
127 cord_individual_obj[indivial_i,:] = [ 1. 7. 99. 106.]
128 cord_individual_obj[indivial_i,:] = [ 2. 11. 89. 100.]
129 cord_individual_obj[indivial_i,:] = [ 3. 10. 74. 84.]
130 cord_individual_obj[indivial_i,:] = [ 4. 8. 78. 86.]
131 cord_individual_obj[indivial_i,:] = [ 5. 10. 64. 74.]
132 cord_individual_obj[indivial_i,:] = [ 6. 8. 85. 93.]
133 cord_individual_obj[indivial_i,:] = [ 7. 9. 110. 119.]
134 cord_individual_obj[indivial_i,:] = [ 8. 10. 85. 95.]
135 cord_individual_obj[indivial_i,:] = [ 9. 11. 103. 114.]
136 cord_individual_obj[indivial_i,:] = [10. 7. 96. 103.]
137 cord_individual_obj[indivial_i,:] = [11. 9. 91. 100.]
138 cord_individual_obj[indivial_i,:] = [12. 8. 102. 110.]
139 cord_individual_obj[indivial_i,:] = [13. 10. 123. 133.]
140 cord_individual_obj[indivial_i,:] = [14. 7. 109. 116.]
141 cord_individual_obj[indivial_i,:] = [15. 9. 80. 89.]
142 cord_individual_obj[indivial_i,:] = [16. 9. 68. 77.]
143 cord_individual_obj[indivial_i,:] = [17. 8. 83. 91.]
144 cord_individual_obj[indivial_i,:] = [18. 9. 135. 144.]
145 cord_individual_obj[indivial_i,:] = [19. 8. 89. 97.]
146 cord_individual_obj[indivial_i,:] = [20. 9. 89. 98.]
147 cord_individual_obj[indivial_i,:] = [21. 9. 96. 105.]
148 cord_individual_obj[indivial_i,:] = [22. 7. 55. 62.]
149 cord_individual_obj[indivial_i,:] = [23. 8. 90. 98.]
150 cord_individual_obj[indivial_i,:] = [24. 7. 137. 144.]
151
152 min(cord_individual_obj[:,3]) = 62.0
153 historl_G_best_iter[iter, 3] = 62.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 9. 96. 105.]
158 cord_individual_obj[indivial_i,:] = [ 1. 10. 130. 140.]
159 cord_individual_obj[indivial_i,:] = [ 2. 10. 104. 114.]
160 cord_individual_obj[indivial_i,:] = [ 3. 9. 75. 84.]
161 cord_individual_obj[indivial_i,:] = [ 4. 11. 112. 123.]
162 cord_individual_obj[indivial_i,:] = [ 5. 11. 176. 187.]
163 cord_individual_obj[indivial_i,:] = [ 6. 9. 80. 89.]

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164 cord_individual_obj[indivial_i,:] = [ 7. 9. 131. 140.]
165 cord_individual_obj[indivial_i,:] = [ 8. 8. 122. 130.]
166 cord_individual_obj[indivial_i,:] = [ 9. 10. 85. 95.]
167 cord_individual_obj[indivial_i,:] = [10. 8. 104. 112.]
168 cord_individual_obj[indivial_i,:] = [11. 6. 40. 46.]
169 cord_individual_obj[indivial_i,:] = [12. 11. 101. 112.]
170 cord_individual_obj[indivial_i,:] = [13. 8. 120. 128.]
171 cord_individual_obj[indivial_i,:] = [14. 11. 101. 112.]
172 cord_individual_obj[indivial_i,:] = [15. 9. 86. 95.]
173 cord_individual_obj[indivial_i,:] = [16. 11. 99. 110.]
174 cord_individual_obj[indivial_i,:] = [17. 8. 124. 132.]
175 cord_individual_obj[indivial_i,:] = [18. 7. 55. 62.]
176 cord_individual_obj[indivial_i,:] = [19. 7. 144. 151.]
177 cord_individual_obj[indivial_i,:] = [20. 9. 106. 115.]
178 cord_individual_obj[indivial_i,:] = [21. 10. 81. 91.]
179 cord_individual_obj[indivial_i,:] = [22. 10. 89. 99.]
180 cord_individual_obj[indivial_i,:] = [23. 10. 97. 107.]
181 cord_individual_obj[indivial_i,:] = [24. 9. 62. 71.]
182
183 min(cord_individual_obj[:,3]) = 46.0
184 historl_G_best_iter[iter,3] = 46.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i,:] = [ 0. 8. 60. 68.]
189 cord_individual_obj[indivial_i,:] = [ 1. 8. 154. 162.]
190 cord_individual_obj[indivial_i,:] = [ 2. 7. 95. 102.]
191 cord_individual_obj[indivial_i,:] = [ 3. 8. 132. 140.]
192 cord_individual_obj[indivial_i,:] = [ 4. 9. 104. 113.]
193 cord_individual_obj[indivial_i,:] = [ 5. 6. 40. 46.]
194 cord_individual_obj[indivial_i,:] = [ 6. 10. 121. 131.]
195 cord_individual_obj[indivial_i,:] = [ 7. 7. 86. 93.]
196 cord_individual_obj[indivial_i,:] = [ 8. 7. 54. 61.]
197 cord_individual_obj[indivial_i,:] = [ 9. 10. 117. 127.]
198 cord_individual_obj[indivial_i,:] = [10. 9. 66. 75.]
199 cord_individual_obj[indivial_i,:] = [11. 9. 93. 102.]
200 cord_individual_obj[indivial_i,:] = [12. 8. 75. 83.]
201 cord_individual_obj[indivial_i,:] = [13. 9. 102. 111.]
202 cord_individual_obj[indivial_i,:] = [14. 11. 114. 125.]
203 cord_individual_obj[indivial_i,:] = [15. 8. 140. 148.]
204 cord_individual_obj[indivial_i,:] = [16. 6. 99. 105.]
205 cord_individual_obj[indivial_i,:] = [17. 8. 111. 119.]
206 cord_individual_obj[indivial_i,:] = [18. 8. 94. 102.]
207 cord_individual_obj[indivial_i,:] = [19. 8. 93. 101.]
208 cord_individual_obj[indivial_i,:] = [20. 8. 153. 161.]
209 cord_individual_obj[indivial_i,:] = [21. 8. 79. 87.]
210 cord_individual_obj[indivial_i,:] = [22. 8. 60. 68.]
211 cord_individual_obj[indivial_i,:] = [23. 9. 92. 101.]
212 cord_individual_obj[indivial_i,:] = [24. 7. 104. 111.]
213
214 min(cord_individual_obj[:,3]) = 46.0
215 historl_G_best_iter[iter,3] = 46.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i,:] = [ 0. 9. 90. 99.]
220 cord_individual_obj[indivial_i,:] = [ 1. 6. 40. 46.]
221 cord_individual_obj[indivial_i,:] = [ 2. 8. 71. 79.]
222 cord_individual_obj[indivial_i,:] = [ 3. 8. 155. 163.]
223 cord_individual_obj[indivial_i,:] = [ 4. 9. 89. 98.]
224 cord_individual_obj[indivial_i,:] = [ 5. 9. 96. 105.]
225 cord_individual_obj[indivial_i,:] = [ 6. 10. 122. 132.]
226 cord_individual_obj[indivial_i,:] = [ 7. 8. 78. 86.]
227 cord_individual_obj[indivial_i,:] = [ 8. 8. 104. 112.]
228 cord_individual_obj[indivial_i,:] = [ 9. 9. 85. 94.]
229 cord_individual_obj[indivial_i,:] = [10. 8. 55. 63.]
230 cord_individual_obj[indivial_i,:] = [11. 7. 118. 125.]
231 cord_individual_obj[indivial_i,:] = [12. 10. 96. 106.]
232 cord_individual_obj[indivial_i,:] = [13. 7. 136. 143.]
233 cord_individual_obj[indivial_i,:] = [14. 9. 79. 88.]
234 cord_individual_obj[indivial_i,:] = [15. 8. 95. 103.]
235 cord_individual_obj[indivial_i,:] = [16. 8. 106. 114.]
236 cord_individual_obj[indivial_i,:] = [17. 8. 123. 131.]
237 cord_individual_obj[indivial_i,:] = [18. 8. 78. 86.]
238 cord_individual_obj[indivial_i,:] = [19. 7. 105. 112.]
239 cord_individual_obj[indivial_i,:] = [20. 8. 88. 96.]
240 cord_individual_obj[indivial_i,:] = [21. 8. 77. 85.]
241 cord_individual_obj[indivial_i,:] = [22. 10. 92. 102.]
242 cord_individual_obj[indivial_i,:] = [23. 8. 73. 81.]
243 cord_individual_obj[indivial_i,:] = [24. 10. 119. 129.]
244
245 min(cord_individual_obj[:,3]) = 46.0
246 historl_G_best_iter[iter,3] = 46.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0.  8. 85. 93.]
251 cord_individual_obj[indivial_i, :] = [ 1. 10. 124. 134.]
252 cord_individual_obj[indivial_i, :] = [ 2.  7. 70. 77.]
253 cord_individual_obj[indivial_i, :] = [ 3.  6. 40. 46.]
254 cord_individual_obj[indivial_i, :] = [ 4. 10. 129. 139.]
255 cord_individual_obj[indivial_i, :] = [ 5.  8. 120. 128.]
256 cord_individual_obj[indivial_i, :] = [ 6.  9. 83. 92.]
257 cord_individual_obj[indivial_i, :] = [ 7.  8. 122. 130.]
258 cord_individual_obj[indivial_i, :] = [ 8.  9. 109. 118.]
259 cord_individual_obj[indivial_i, :] = [ 9.  9. 143. 152.]
260 cord_individual_obj[indivial_i, :] = [10. 7. 70. 77.]
261 cord_individual_obj[indivial_i, :] = [11. 7. 138. 145.]
262 cord_individual_obj[indivial_i, :] = [12. 11. 140. 151.]
263 cord_individual_obj[indivial_i, :] = [13. 10. 115. 125.]
264 cord_individual_obj[indivial_i, :] = [14. 10. 115. 125.]
265 cord_individual_obj[indivial_i, :] = [15. 8. 73. 81.]
266 cord_individual_obj[indivial_i, :] = [16. 8. 93. 101.]
267 cord_individual_obj[indivial_i, :] = [17. 7. 146. 153.]
268 cord_individual_obj[indivial_i, :] = [18. 9. 88. 97.]
269 cord_individual_obj[indivial_i, :] = [19. 6. 82. 88.]
270 cord_individual_obj[indivial_i, :] = [20. 7. 80. 87.]
271 cord_individual_obj[indivial_i, :] = [21. 8. 84. 92.]
272 cord_individual_obj[indivial_i, :] = [22. 11. 84. 95.]
273 cord_individual_obj[indivial_i, :] = [23. 8. 82. 90.]
274 cord_individual_obj[indivial_i, :] = [24. 9. 94. 103.]
275

276 min(cord_individual_obj[:, 3]) = 46.0
277 historl_G_best_iter[iter, 3] = 46.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0.  8. 125. 133.]
282 cord_individual_obj[indivial_i, :] = [ 1.  9. 91. 100.]
283 cord_individual_obj[indivial_i, :] = [ 2.  7. 77. 84.]
284 cord_individual_obj[indivial_i, :] = [ 3.  8. 143. 151.]
285 cord_individual_obj[indivial_i, :] = [ 4. 9. 144. 153.]
286 cord_individual_obj[indivial_i, :] = [ 5.  8. 48. 56.]
287 cord_individual_obj[indivial_i, :] = [ 6.  7. 103. 110.]
288 cord_individual_obj[indivial_i, :] = [ 7.  9. 74. 83.]
289 cord_individual_obj[indivial_i, :] = [ 8.  7. 127. 134.]
290 cord_individual_obj[indivial_i, :] = [ 9. 10. 107. 117.]
291 cord_individual_obj[indivial_i, :] = [10. 8. 93. 101.]
292 cord_individual_obj[indivial_i, :] = [11. 8. 87. 95.]
293 cord_individual_obj[indivial_i, :] = [12. 11. 121. 132.]
294 cord_individual_obj[indivial_i, :] = [13. 9. 98. 107.]
295 cord_individual_obj[indivial_i, :] = [14. 9. 111. 120.]
296 cord_individual_obj[indivial_i, :] = [15. 9. 80. 89.]
297 cord_individual_obj[indivial_i, :] = [16. 7. 88. 95.]
298 cord_individual_obj[indivial_i, :] = [17. 6. 40. 46.]
299 cord_individual_obj[indivial_i, :] = [18. 9. 173. 182.]
300 cord_individual_obj[indivial_i, :] = [19. 7. 106. 113.]
301 cord_individual_obj[indivial_i, :] = [20. 8. 76. 84.]
302 cord_individual_obj[indivial_i, :] = [21. 9. 121. 130.]
303 cord_individual_obj[indivial_i, :] = [22. 8. 86. 94.]
304 cord_individual_obj[indivial_i, :] = [23. 8. 111. 119.]
305 cord_individual_obj[indivial_i, :] = [24. 9. 74. 83.]
306

307 min(cord_individual_obj[:, 3]) = 46.0
308 historl_G_best_iter[iter, 3] = 46.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0.  8. 79. 87.]
313 cord_individual_obj[indivial_i, :] = [ 1.  9. 68. 77.]
314 cord_individual_obj[indivial_i, :] = [ 2.  8. 73. 81.]
315 cord_individual_obj[indivial_i, :] = [ 3.  7. 82. 89.]
316 cord_individual_obj[indivial_i, :] = [ 4.  9. 112. 121.]
317 cord_individual_obj[indivial_i, :] = [ 5. 9. 76. 85.]
318 cord_individual_obj[indivial_i, :] = [ 6.  8. 59. 67.]
319 cord_individual_obj[indivial_i, :] = [ 7.  9. 115. 124.]
320 cord_individual_obj[indivial_i, :] = [ 8.  7. 83. 90.]
321 cord_individual_obj[indivial_i, :] = [ 9.  9. 135. 144.]
322 cord_individual_obj[indivial_i, :] = [10. 9. 162. 171.]
323 cord_individual_obj[indivial_i, :] = [11. 7. 123. 130.]
324 cord_individual_obj[indivial_i, :] = [12. 10. 124. 134.]
325 cord_individual_obj[indivial_i, :] = [13. 8. 91. 99.]
326 cord_individual_obj[indivial_i, :] = [14. 9. 131. 140.]
327 cord_individual_obj[indivial_i, :] = [15. 9. 128. 137.]
328 cord_individual_obj[indivial_i, :] = [16. 8. 116. 124.]
329 cord_individual_obj[indivial_i, :] = [17. 7. 117. 124.]
330 cord_individual_obj[indivial_i, :] = [18. 6. 40. 46.]
331 cord_individual_obj[indivial_i, :] = [19. 7. 113. 120.]

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332 cord_individual_obj[indivial_i, :] = [ 20.  8. 102. 110.]
333 cord_individual_obj[indivial_i, :] = [ 21. 10. 102. 112.]
334 cord_individual_obj[indivial_i, :] = [ 22.  8. 142. 150.]
335 cord_individual_obj[indivial_i, :] = [23.  9. 58. 67.]
336 cord_individual_obj[indivial_i, :] = [ 24.  7. 113. 120.]
337
338 min(cord_individual_obj[:, 3]) = 46.0
339 histol_G_best_iter[iter, 3] = 46.0
340 Begin iteration:
341
342 iter = 10
343 cord_individual_obj[indivial_i, :] = [ 0.  9. 88. 97.]
344 cord_individual_obj[indivial_i, :] = [ 1.  8. 99. 107.]
345 cord_individual_obj[indivial_i, :] = [ 2.  8. 116. 124.]
346 cord_individual_obj[indivial_i, :] = [ 3.  8. 95. 103.]
347 cord_individual_obj[indivial_i, :] = [ 4.  8. 89. 97.]
348 cord_individual_obj[indivial_i, :] = [ 5.  8. 75. 83.]
349 cord_individual_obj[indivial_i, :] = [ 6.  8. 135. 143.]
350 cord_individual_obj[indivial_i, :] = [ 7.  8. 75. 83.]
351 cord_individual_obj[indivial_i, :] = [ 8. 10. 96. 106.]
352 cord_individual_obj[indivial_i, :] = [ 9.  8. 102. 110.]
353 cord_individual_obj[indivial_i, :] = [10.  6. 40. 46.]
354 cord_individual_obj[indivial_i, :] = [11.  6. 133. 139.]
355 cord_individual_obj[indivial_i, :] = [12.  9. 126. 135.]
356 cord_individual_obj[indivial_i, :] = [13.  9. 92. 101.]
357 cord_individual_obj[indivial_i, :] = [14. 12. 112. 124.]
358 cord_individual_obj[indivial_i, :] = [15.  7. 97. 104.]
359 cord_individual_obj[indivial_i, :] = [16.  7. 96. 103.]
360 cord_individual_obj[indivial_i, :] = [17.  7. 116. 123.]
361 cord_individual_obj[indivial_i, :] = [18.  9. 110. 119.]
362 cord_individual_obj[indivial_i, :] = [19.  7. 87. 94.]
363 cord_individual_obj[indivial_i, :] = [20.  8. 65. 73.]
364 cord_individual_obj[indivial_i, :] = [21.  7. 158. 165.]
365 cord_individual_obj[indivial_i, :] = [22. 10. 90. 100.]
366 cord_individual_obj[indivial_i, :] = [23.  7. 73. 80.]
367 cord_individual_obj[indivial_i, :] = [24.  9. 134. 143.]
368
369 min(cord_individual_obj[:, 3]) = 46.0
370 histol_G_best_iter[iter, 3] = 46.0
371 Begin iteration:
372
373 iter = 11
374 cord_individual_obj[indivial_i, :] = [ 0. 10. 102. 112.]
375 cord_individual_obj[indivial_i, :] = [ 1.  9. 81. 90.]
376 cord_individual_obj[indivial_i, :] = [ 2.  8. 67. 75.]
377 cord_individual_obj[indivial_i, :] = [ 3.  7. 114. 121.]
378 cord_individual_obj[indivial_i, :] = [ 4.  8. 113. 121.]
379 cord_individual_obj[indivial_i, :] = [ 5.  9. 70. 79.]
380 cord_individual_obj[indivial_i, :] = [ 6.  8. 139. 147.]
381 cord_individual_obj[indivial_i, :] = [ 7.  9. 141. 150.]
382 cord_individual_obj[indivial_i, :] = [ 8.  9. 80. 89.]
383 cord_individual_obj[indivial_i, :] = [ 9.  9. 101. 110.]
384 cord_individual_obj[indivial_i, :] = [10.  9. 84. 93.]
385 cord_individual_obj[indivial_i, :] = [11.  7. 46. 53.]
386 cord_individual_obj[indivial_i, :] = [12.  9. 115. 124.]
387 cord_individual_obj[indivial_i, :] = [13.  8. 108. 116.]
388 cord_individual_obj[indivial_i, :] = [14.  8. 83. 91.]
389 cord_individual_obj[indivial_i, :] = [15.  9. 117. 126.]
390 cord_individual_obj[indivial_i, :] = [16.  7. 120. 127.]
391 cord_individual_obj[indivial_i, :] = [17.  7. 141. 148.]
392 cord_individual_obj[indivial_i, :] = [18.  9. 88. 97.]
393 cord_individual_obj[indivial_i, :] = [19.  8. 147. 155.]
394 cord_individual_obj[indivial_i, :] = [20.  9. 124. 133.]
395 cord_individual_obj[indivial_i, :] = [21.  6. 40. 46.]
396 cord_individual_obj[indivial_i, :] = [22.  7. 89. 96.]
397 cord_individual_obj[indivial_i, :] = [23.  9. 150. 159.]
398 cord_individual_obj[indivial_i, :] = [24. 10. 141. 151.]
399
400 min(cord_individual_obj[:, 3]) = 46.0
401 histol_G_best_iter[iter, 3] = 46.0
402 Begin iteration:
403
404 iter = 12
405 cord_individual_obj[indivial_i, :] = [ 0.  9. 113. 122.]
406 cord_individual_obj[indivial_i, :] = [ 1.  9. 77. 86.]
407 cord_individual_obj[indivial_i, :] = [ 2.  7. 99. 106.]
408 cord_individual_obj[indivial_i, :] = [ 3.  9. 150. 159.]
409 cord_individual_obj[indivial_i, :] = [ 4.  7. 102. 109.]
410 cord_individual_obj[indivial_i, :] = [ 5. 10. 60. 70.]
411 cord_individual_obj[indivial_i, :] = [ 6.  9. 92. 101.]
412 cord_individual_obj[indivial_i, :] = [ 7.  8. 111. 119.]
413 cord_individual_obj[indivial_i, :] = [ 8.  8. 102. 110.]
414 cord_individual_obj[indivial_i, :] = [ 9.  9. 118. 127.]
415 cord_individual_obj[indivial_i, :] = [10.  9. 105. 114.]

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416 cord_individual_obj[indivial_i,:] = [ 11. 6. 140. 146.]
417 cord_individual_obj[indivial_i,:] = [ 12. 11. 134. 145.]
418 cord_individual_obj[indivial_i,:] = [13. 9. 79. 88.]
419 cord_individual_obj[indivial_i,:] = [ 14. 9. 104. 113.]
420 cord_individual_obj[indivial_i,:] = [ 15. 7. 101. 108.]
421 cord_individual_obj[indivial_i,:] = [ 16. 8. 109. 117.]
422 cord_individual_obj[indivial_i,:] = [ 17. 7. 117. 124.]
423 cord_individual_obj[indivial_i,:] = [ 18. 8. 111. 119.]
424 cord_individual_obj[indivial_i,:] = [19. 6. 83. 89.]
425 cord_individual_obj[indivial_i,:] = [ 20. 8. 103. 111.]
426 cord_individual_obj[indivial_i,:] = [ 21. 9. 130. 139.]
427 cord_individual_obj[indivial_i,:] = [ 22. 9. 104. 113.]
428 cord_individual_obj[indivial_i,:] = [23. 6. 40. 46.]
429 cord_individual_obj[indivial_i,:] = [ 24. 9. 121. 130.]
430
431 min(cord_individual_obj[:,3]) = 46.0
432 histol_G_best_iter[iter,3] = 46.0
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. 128. 136.]
438 cord_individual_obj[indivial_i,:] = [ 2. 9. 116. 125.]
439 cord_individual_obj[indivial_i,:] = [ 3. 6. 40. 46.]
440 cord_individual_obj[indivial_i,:] = [ 4. 8. 153. 161.]
441 cord_individual_obj[indivial_i,:] = [ 5. 7. 115. 122.]
442 cord_individual_obj[indivial_i,:] = [ 6. 8. 186. 194.]
443 cord_individual_obj[indivial_i,:] = [ 7. 7. 72. 79.]
444 cord_individual_obj[indivial_i,:] = [ 8. 9. 88. 97.]
445 cord_individual_obj[indivial_i,:] = [ 9. 8. 126. 134.]
446 cord_individual_obj[indivial_i,:] = [10. 10. 103. 113.]
447 cord_individual_obj[indivial_i,:] = [11. 9. 166. 175.]
448 cord_individual_obj[indivial_i,:] = [12. 8. 75. 83.]
449 cord_individual_obj[indivial_i,:] = [13. 8. 154. 162.]
450 cord_individual_obj[indivial_i,:] = [14. 8. 79. 87.]
451 cord_individual_obj[indivial_i,:] = [15. 8. 124. 132.]
452 cord_individual_obj[indivial_i,:] = [16. 8. 132. 140.]
453 cord_individual_obj[indivial_i,:] = [17. 7. 126. 133.]
454 cord_individual_obj[indivial_i,:] = [18. 9. 90. 99.]
455 cord_individual_obj[indivial_i,:] = [19. 7. 106. 113.]
456 cord_individual_obj[indivial_i,:] = [20. 8. 77. 85.]
457 cord_individual_obj[indivial_i,:] = [21. 7. 97. 104.]
458 cord_individual_obj[indivial_i,:] = [22. 10. 138. 148.]
459 cord_individual_obj[indivial_i,:] = [23. 8. 51. 59.]
460 cord_individual_obj[indivial_i,:] = [ 24. 8. 144. 152.]
461
462 min(cord_individual_obj[:,3]) = 46.0
463 histol_G_best_iter[iter,3] = 46.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [ 0. 10. 62. 72.]
468 cord_individual_obj[indivial_i,:] = [ 1. 9. 150. 159.]
469 cord_individual_obj[indivial_i,:] = [ 2. 7. 72. 79.]
470 cord_individual_obj[indivial_i,:] = [ 3. 9. 142. 151.]
471 cord_individual_obj[indivial_i,:] = [ 4. 8. 88. 96.]
472 cord_individual_obj[indivial_i,:] = [ 5. 9. 110. 119.]
473 cord_individual_obj[indivial_i,:] = [ 6. 6. 40. 46.]
474 cord_individual_obj[indivial_i,:] = [ 7. 8. 99. 107.]
475 cord_individual_obj[indivial_i,:] = [ 8. 11. 115. 126.]
476 cord_individual_obj[indivial_i,:] = [ 9. 9. 116. 125.]
477 cord_individual_obj[indivial_i,:] = [10. 9. 160. 169.]
478 cord_individual_obj[indivial_i,:] = [11. 8. 137. 145.]
479 cord_individual_obj[indivial_i,:] = [12. 9. 126. 135.]
480 cord_individual_obj[indivial_i,:] = [13. 8. 119. 127.]
481 cord_individual_obj[indivial_i,:] = [14. 8. 110. 118.]
482 cord_individual_obj[indivial_i,:] = [15. 8. 101. 109.]
483 cord_individual_obj[indivial_i,:] = [16. 7. 84. 91.]
484 cord_individual_obj[indivial_i,:] = [17. 7. 97. 104.]
485 cord_individual_obj[indivial_i,:] = [18. 7. 128. 135.]
486 cord_individual_obj[indivial_i,:] = [19. 7. 103. 110.]
487 cord_individual_obj[indivial_i,:] = [20. 7. 98. 105.]
488 cord_individual_obj[indivial_i,:] = [21. 10. 127. 137.]
489 cord_individual_obj[indivial_i,:] = [22. 10. 85. 95.]
490 cord_individual_obj[indivial_i,:] = [23. 8. 108. 116.]
491 cord_individual_obj[indivial_i,:] = [ 24. 8. 113. 121.]
492
493 min(cord_individual_obj[:,3]) = 46.0
494 histol_G_best_iter[iter,3] = 46.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [ 0. 9. 91. 100.]
499 cord_individual_obj[indivial_i,:] = [ 1. 10. 130. 140.]

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500 cord_individual_obj[indivial_i, :] = [ 2.  9. 85. 94.]
501 cord_individual_obj[indivial_i, :] = [ 3.  6. 83. 89.]
502 cord_individual_obj[indivial_i, :] = [ 4.  8. 87. 95.]
503 cord_individual_obj[indivial_i, :] = [ 5.  9. 107. 116.]
504 cord_individual_obj[indivial_i, :] = [ 6.  9. 132. 141.]
505 cord_individual_obj[indivial_i, :] = [ 7.  7. 75. 82.]
506 cord_individual_obj[indivial_i, :] = [ 8.  9. 87. 96.]
507 cord_individual_obj[indivial_i, :] = [ 9.  8. 97. 105.]
508 cord_individual_obj[indivial_i, :] = [10.  6. 40. 46.]
509 cord_individual_obj[indivial_i, :] = [11.  6. 77. 83.]
510 cord_individual_obj[indivial_i, :] = [12.  9. 62. 71.]
511 cord_individual_obj[indivial_i, :] = [13.  9. 91. 100.]
512 cord_individual_obj[indivial_i, :] = [14.  10. 101. 111.]
513 cord_individual_obj[indivial_i, :] = [15.  8. 130. 138.]
514 cord_individual_obj[indivial_i, :] = [16.  7. 120. 127.]
515 cord_individual_obj[indivial_i, :] = [17.  8. 52. 60.]
516 cord_individual_obj[indivial_i, :] = [18.  9. 108. 117.]
517 cord_individual_obj[indivial_i, :] = [19.  7. 160. 167.]
518 cord_individual_obj[indivial_i, :] = [20.  8. 90. 98.]
519 cord_individual_obj[indivial_i, :] = [21.  8. 122. 130.]
520 cord_individual_obj[indivial_i, :] = [22.  8. 89. 97.]
521 cord_individual_obj[indivial_i, :] = [23.  6. 139. 145.]
522 cord_individual_obj[indivial_i, :] = [24. 11. 94. 105.]
523
524 min(cord_individual_obj[:, 3]) = 46.0
525 histol_G_best_iter[iter, 3] = 46.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i, :] = [ 0.  9. 131. 140.]
530 cord_individual_obj[indivial_i, :] = [ 1.  9. 59. 68.]
531 cord_individual_obj[indivial_i, :] = [ 2.  8. 99. 107.]
532 cord_individual_obj[indivial_i, :] = [ 3.  8. 143. 151.]
533 cord_individual_obj[indivial_i, :] = [ 4.  9. 131. 140.]
534 cord_individual_obj[indivial_i, :] = [ 5.  8. 94. 102.]
535 cord_individual_obj[indivial_i, :] = [ 6.  9. 133. 142.]
536 cord_individual_obj[indivial_i, :] = [ 7.  9. 95. 104.]
537 cord_individual_obj[indivial_i, :] = [ 8.  7. 92. 99.]
538 cord_individual_obj[indivial_i, :] = [ 9.  8. 85. 93.]
539 cord_individual_obj[indivial_i, :] = [10.  9. 55. 64.]
540 cord_individual_obj[indivial_i, :] = [11.  7. 143. 150.]
541 cord_individual_obj[indivial_i, :] = [12. 11. 141. 152.]
542 cord_individual_obj[indivial_i, :] = [13.  8. 94. 102.]
543 cord_individual_obj[indivial_i, :] = [14.  9. 103. 112.]
544 cord_individual_obj[indivial_i, :] = [15.  8. 70. 78.]
545 cord_individual_obj[indivial_i, :] = [16.  8. 49. 57.]
546 cord_individual_obj[indivial_i, :] = [17.  7. 110. 117.]
547 cord_individual_obj[indivial_i, :] = [18. 10. 112. 122.]
548 cord_individual_obj[indivial_i, :] = [19.  6. 40. 46.]
549 cord_individual_obj[indivial_i, :] = [20.  9. 122. 131.]
550 cord_individual_obj[indivial_i, :] = [21.  9. 99. 108.]
551 cord_individual_obj[indivial_i, :] = [22.  8. 77. 85.]
552 cord_individual_obj[indivial_i, :] = [23.  7. 124. 131.]
553 cord_individual_obj[indivial_i, :] = [24.  9. 108. 117.]
554
555 min(cord_individual_obj[:, 3]) = 46.0
556 histol_G_best_iter[iter, 3] = 46.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i, :] = [ 0.  7. 90. 97.]
561 cord_individual_obj[indivial_i, :] = [ 1.  8. 92. 100.]
562 cord_individual_obj[indivial_i, :] = [ 2.  8. 101. 109.]
563 cord_individual_obj[indivial_i, :] = [ 3.  8. 100. 108.]
564 cord_individual_obj[indivial_i, :] = [ 4.  8. 146. 154.]
565 cord_individual_obj[indivial_i, :] = [ 5.  8. 58. 66.]
566 cord_individual_obj[indivial_i, :] = [ 6.  8. 110. 118.]
567 cord_individual_obj[indivial_i, :] = [ 7.  8. 64. 72.]
568 cord_individual_obj[indivial_i, :] = [ 8.  9. 150. 159.]
569 cord_individual_obj[indivial_i, :] = [ 9. 11. 100. 111.]
570 cord_individual_obj[indivial_i, :] = [10.  8. 122. 130.]
571 cord_individual_obj[indivial_i, :] = [11.  7. 60. 67.]
572 cord_individual_obj[indivial_i, :] = [12.  6. 40. 46.]
573 cord_individual_obj[indivial_i, :] = [13.  7. 111. 118.]
574 cord_individual_obj[indivial_i, :] = [14.  9. 106. 115.]
575 cord_individual_obj[indivial_i, :] = [15.  8. 118. 126.]
576 cord_individual_obj[indivial_i, :] = [16.  6. 96. 102.]
577 cord_individual_obj[indivial_i, :] = [17.  7. 95. 102.]
578 cord_individual_obj[indivial_i, :] = [18.  8. 150. 158.]
579 cord_individual_obj[indivial_i, :] = [19.  6. 83. 89.]
580 cord_individual_obj[indivial_i, :] = [20.  8. 118. 126.]
581 cord_individual_obj[indivial_i, :] = [21.  8. 97. 105.]
582 cord_individual_obj[indivial_i, :] = [22.  9. 102. 111.]
583 cord_individual_obj[indivial_i, :] = [23. 10. 111. 121.]

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584     cord_individual_obj[indivial_i, :] = [ 24.  8. 121. 129.]
585
586     min(cord_individual_obj[:, 3]) = 46.0
587     historl_G_best_iter[iter, 3] = 46.0
588 Begin iteration:
589
590 iter = 18
591     cord_individual_obj[indivial_i, :] = [ 0.  9. 62. 71.]
592     cord_individual_obj[indivial_i, :] = [ 1.  9. 96. 105.]
593     cord_individual_obj[indivial_i, :] = [ 2.  9. 92. 101.]
594     cord_individual_obj[indivial_i, :] = [ 3. 10. 152. 162.]
595     cord_individual_obj[indivial_i, :] = [ 4.  8. 119. 127.]
596     cord_individual_obj[indivial_i, :] = [ 5.  9. 115. 124.]
597     cord_individual_obj[indivial_i, :] = [ 6.  8. 131. 139.]
598     cord_individual_obj[indivial_i, :] = [ 7.  9. 127. 136.]
599     cord_individual_obj[indivial_i, :] = [ 8.  6. 40. 46.]
600     cord_individual_obj[indivial_i, :] = [ 9.  8. 86. 94.]
601     cord_individual_obj[indivial_i, :] = [10.  7. 131. 138.]
602     cord_individual_obj[indivial_i, :] = [11.  7. 92. 99.]
603     cord_individual_obj[indivial_i, :] = [12. 12. 143. 155.]
604     cord_individual_obj[indivial_i, :] = [13.  9. 110. 119.]
605     cord_individual_obj[indivial_i, :] = [14.  7. 150. 157.]
606     cord_individual_obj[indivial_i, :] = [15.  8. 69. 77.]
607     cord_individual_obj[indivial_i, :] = [16.  8. 114. 122.]
608     cord_individual_obj[indivial_i, :] = [17.  8. 62. 70.]
609     cord_individual_obj[indivial_i, :] = [18.  9. 110. 119.]
610     cord_individual_obj[indivial_i, :] = [19.  7. 100. 107.]
611     cord_individual_obj[indivial_i, :] = [20.  7. 59. 66.]
612     cord_individual_obj[indivial_i, :] = [21.  8. 59. 67.]
613     cord_individual_obj[indivial_i, :] = [22.  8. 82. 90.]
614     cord_individual_obj[indivial_i, :] = [23.  6. 114. 120.]
615     cord_individual_obj[indivial_i, :] = [24.  9. 134. 143.]
616
617     min(cord_individual_obj[:, 3]) = 46.0
618     historl_G_best_iter[iter, 3] = 46.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0.  9. 95. 104.]
623     cord_individual_obj[indivial_i, :] = [ 1.  9. 92. 101.]
624     cord_individual_obj[indivial_i, :] = [ 2.  7. 90. 97.]
625     cord_individual_obj[indivial_i, :] = [ 3.  6. 40. 46.]
626     cord_individual_obj[indivial_i, :] = [ 4.  9. 114. 123.]
627     cord_individual_obj[indivial_i, :] = [ 5.  8. 83. 91.]
628     cord_individual_obj[indivial_i, :] = [ 6.  9. 85. 94.]
629     cord_individual_obj[indivial_i, :] = [ 7.  8. 81. 89.]
630     cord_individual_obj[indivial_i, :] = [ 8.  7. 65. 72.]
631     cord_individual_obj[indivial_i, :] = [ 9.  9. 139. 148.]
632     cord_individual_obj[indivial_i, :] = [10.  8. 92. 100.]
633     cord_individual_obj[indivial_i, :] = [11.  8. 101. 109.]
634     cord_individual_obj[indivial_i, :] = [12.  8. 119. 127.]
635     cord_individual_obj[indivial_i, :] = [13.  8. 79. 87.]
636     cord_individual_obj[indivial_i, :] = [14.  8. 72. 80.]
637     cord_individual_obj[indivial_i, :] = [15.  8. 135. 143.]
638     cord_individual_obj[indivial_i, :] = [16.  8. 101. 109.]
639     cord_individual_obj[indivial_i, :] = [17.  8. 157. 165.]
640     cord_individual_obj[indivial_i, :] = [18.  8. 73. 81.]
641     cord_individual_obj[indivial_i, :] = [19.  6. 83. 89.]
642     cord_individual_obj[indivial_i, :] = [20.  7. 88. 95.]
643     cord_individual_obj[indivial_i, :] = [21.  9. 81. 90.]
644     cord_individual_obj[indivial_i, :] = [22.  9. 93. 102.]
645     cord_individual_obj[indivial_i, :] = [23.  8. 74. 82.]
646     cord_individual_obj[indivial_i, :] = [24.  8. 71. 79.]
647
648     min(cord_individual_obj[:, 3]) = 46.0
649     historl_G_best_iter[iter, 3] = 46.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0.  9. 93. 102.]
654     cord_individual_obj[indivial_i, :] = [ 1.  8. 97. 105.]
655     cord_individual_obj[indivial_i, :] = [ 2.  7. 107. 114.]
656     cord_individual_obj[indivial_i, :] = [ 3.  9. 142. 151.]
657     cord_individual_obj[indivial_i, :] = [ 4. 10. 82. 92.]
658     cord_individual_obj[indivial_i, :] = [ 5.  9. 74. 83.]
659     cord_individual_obj[indivial_i, :] = [ 6.  9. 102. 111.]
660     cord_individual_obj[indivial_i, :] = [ 7.  8. 123. 131.]
661     cord_individual_obj[indivial_i, :] = [ 8.  8. 112. 120.]
662     cord_individual_obj[indivial_i, :] = [ 9.  7. 143. 150.]
663     cord_individual_obj[indivial_i, :] = [10.  8. 112. 120.]
664     cord_individual_obj[indivial_i, :] = [11.  7. 109. 116.]
665     cord_individual_obj[indivial_i, :] = [12. 10. 89. 99.]
666     cord_individual_obj[indivial_i, :] = [13.  8. 107. 115.]
667     cord_individual_obj[indivial_i, :] = [14.  8. 114. 122.]

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668 cord_individual_obj[individual_i,:] = [ 15. 8. 151. 159.]
669 cord_individual_obj[individual_i,:] = [ 16. 8. 110. 118.]
670 cord_individual_obj[individual_i,:] = [17. 6. 40. 46.]
671 cord_individual_obj[individual_i,:] = [18. 8. 82. 90.]
672 cord_individual_obj[individual_i,:] = [19. 7. 87. 94.]
673 cord_individual_obj[individual_i,:] = [20. 9. 82. 91.]
674 cord_individual_obj[individual_i,:] = [21. 7. 128. 135.]
675 cord_individual_obj[individual_i,:] = [22. 8. 76. 84.]
676 cord_individual_obj[individual_i,:] = [23. 7. 120. 127.]
677 cord_individual_obj[individual_i,:] = [24. 8. 122. 130.]
678
679 min(cord_individual_obj[:, 3]) = 46.0
680 historl_G_best_iter[iter, 3] = 46.0
681 Iteration calculate over
682
683
684
685
686 All item are in Bin and:
687 Bin area = 1080
688 Real_area = 200.0
689 Proportion_of_area = 0.18518518518518517
690 BEST_CHROM =
691 berth: [ 3.5 17.5 4.5 25.5 25. 4.5 12.5 13.5 13. 18. 19. 25. 24. 2.
692 16.5 8. ]
693 time: [2. 5. 5. 0. 1. 3. 4. 1. 3. 1. 3. 4. 2. 0. 0. 0.]
694 num_QC: [4. 3. 4. 3. 3. 3. 2. 3. 6. 4. 3. 2. 2. 4. 5. 3.]
695 Objective function values and some other indicators:
696 Obj0 = 6.00          Obj1 = 40.00        Obj0 + Obj1 = 46.00
697 Total movement of crane: 6.00
698 Total waiting time in berth position: 34.00
699 Total index of q during berthing: 882.00
700 Specific arrangement for each vessel:
701 V_id: 0      li: 7.0      xi: 3.5      bow of i: 0.0      tail of i: 7.0      gama_i0: 2.0      gama_i1: 2.0
    .           gama_i1 + 1: 3.0      gama_i1 - gama_i0: 0.0      duration_time_i: 1.0      demand_i: 80.0      work load_i:
80.0      work load gap_i: 0
702 V_id: 1      li: 3.0      xi: 17.5      bow of i: 16.0      tail of i: 19.0      gama_i0: 5.0      gama_i1: 5
    .           gama_i1 + 1: 6.0      gama_i1 - gama_i0: 0.0      duration_time_i: 1.0      demand_i: 60.0      work
load_i: 60.0      work load gap_i: 0
703 V_id: 2      li: 9.0      xi: 4.5       bow of i: 0.0      tail of i: 9.0       gama_i0: 5.0      gama_i1: 6.0
    .           gama_i1 + 1: 7.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 100.0      work load_i:
100.0     work load gap_i: 0
704 V_id: 3      li: 9.0      xi: 25.5      bow of i: 21.0      tail of i: 30.0      gama_i0: 0.0      gama_i1: 0
    .           gama_i1 + 1: 1.0      gama_i1 - gama_i0: 0.0      duration_time_i: 1.0      demand_i: 60.0      work
load_i: 60.0     work load gap_i: 0
705 V_id: 4      li: 8.0      xi: 25.0      bow of i: 21.0      tail of i: 29.0      gama_i0: 1.0      gama_i1: 1
    .           gama_i1 + 1: 2.0      gama_i1 - gama_i0: 0.0      duration_time_i: 1.0      demand_i: 60.0      work
load_i: 60.0     work load gap_i: 0
706 V_id: 5      li: 9.0      xi: 4.5       bow of i: 0.0      tail of i: 9.0       gama_i0: 3.0      gama_i1: 4.0
    .           gama_i1 + 1: 5.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 80.0      work load_i:
80.0      work load gap_i: 0
707 V_id: 6      li: 7.0      xi: 12.5      bow of i: 9.0       tail of i: 16.0      gama_i0: 4.0      gama_i1: 6
    .           gama_i1 + 1: 7.0      gama_i1 - gama_i0: 2.0      duration_time_i: 3.0      demand_i: 120.0      work
load_i: 120.0     work load gap_i: 0
708 V_id: 7      li: 3.0      xi: 13.5      bow of i: 12.0      tail of i: 15.0      gama_i0: 1.0      gama_i1: 2
    .           gama_i1 + 1: 3.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 100.0      work
load_i: 100.0     work load gap_i: 0
709 V_id: 8      li: 8.0      xi: 13.0       bow of i: 9.0      tail of i: 17.0      gama_i0: 3.0      gama_i1: 3
    .           gama_i1 + 1: 4.0      gama_i1 - gama_i0: 0.0      duration_time_i: 1.0      demand_i: 80.0      work
load_i: 80.0     work load gap_i: 0
710 V_id: 9      li: 6.0      xi: 18.0       bow of i: 15.0      tail of i: 21.0      gama_i0: 1.0      gama_i1: 2
    .           gama_i1 + 1: 3.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 160.0      work
load_i: 160.0     work load gap_i: 0
711 V_id: 10     li: 4.0      xi: 19.0      bow of i: 17.0      tail of i: 21.0      gama_i0: 3.0      gama_i1: 1
    : 4.0         gama_i1 + 1: 5.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 80.0      work
load_i: 80.0     work load gap_i: 0
712 V_id: 11     li: 8.0      xi: 25.0      bow of i: 21.0      tail of i: 29.0      gama_i0: 4.0      gama_i1: 1
    : 6.0         gama_i1 + 1: 7.0      gama_i1 - gama_i0: 2.0      duration_time_i: 3.0      demand_i: 120.0      work
load_i: 120.0     work load gap_i: 0
713 V_id: 12     li: 6.0      xi: 24.0      bow of i: 21.0      tail of i: 27.0      gama_i0: 2.0      gama_i1: 1
    : 3.0         gama_i1 + 1: 4.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 80.0      work
load_i: 80.0     work load gap_i: 0
714 V_id: 13     li: 4.0      xi: 2.0       bow of i: 0.0      tail of i: 4.0       gama_i0: 0.0      gama_i1: 1
    140.0        gama_i1 + 1: 2.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 140.0      work load_i:
140.0      work load gap_i: 0
715 V_id: 14     li: 9.0      xi: 16.5      bow of i: 12.0      tail of i: 21.0      gama_i0: 0.0      gama_i1: 1
    : 0.0         gama_i1 + 1: 1.0      gama_i1 - gama_i0: 0.0      duration_time_i: 1.0      demand_i: 100.0      work
load_i: 100.0     work load gap_i: 0
716 V_id: 15     li: 8.0      xi: 8.0       bow of i: 4.0      tail of i: 12.0      gama_i0: 0.0      gama_i1: 1
    .           gama_i1 + 1: 2.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 120.0      work
load_i: 120.0     work load gap_i: 0
717
718 Algorithm finished and the total CPU time: 734 s
719 End

```