

unknown

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80 cord_individual_obj[indivial_i,:] = [16. 9. 76. 85.]
81 cord_individual_obj[indivial_i,:] = [17. 9. 63. 72.]
82 cord_individual_obj[indivial_i,:] = [18. 9. 92. 101.]
83 cord_individual_obj[indivial_i,:] = [19. 9. 87. 96.]
84 cord_individual_obj[indivial_i,:] = [20. 8. 105. 113.]
85 cord_individual_obj[indivial_i,:] = [21. 9. 154. 163.]
86 cord_individual_obj[indivial_i,:] = [22. 9. 56. 65.]
87 cord_individual_obj[indivial_i,:] = [23. 10. 101. 111.]
88 cord_individual_obj[indivial_i,:] = [24. 8. 101. 109.]
89
90 min(cord_individual_obj[:,3]) = 65.0
91 historl_G_best_iter[iter, 3] = 65.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 9. 161. 170.]
96 cord_individual_obj[indivial_i,:] = [ 1. 11. 83. 94.]
97 cord_individual_obj[indivial_i,:] = [ 2. 9. 80. 89.]
98 cord_individual_obj[indivial_i,:] = [ 3. 8. 87. 95.]
99 cord_individual_obj[indivial_i,:] = [ 4. 9. 102. 111.]
100 cord_individual_obj[indivial_i,:] = [ 5. 10. 62. 72.]
101 cord_individual_obj[indivial_i,:] = [ 6. 10. 66. 76.]
102 cord_individual_obj[indivial_i,:] = [ 7. 9. 56. 65.]
103 cord_individual_obj[indivial_i,:] = [ 8. 9. 52. 61.]
104 cord_individual_obj[indivial_i,:] = [ 9. 10. 65. 75.]
105 cord_individual_obj[indivial_i,:] = [10. 10. 57. 67.]
106 cord_individual_obj[indivial_i,:] = [11. 11. 101. 112.]
107 cord_individual_obj[indivial_i,:] = [12. 8. 80. 88.]
108 cord_individual_obj[indivial_i,:] = [13. 7. 61. 68.]
109 cord_individual_obj[indivial_i,:] = [14. 10. 93. 103.]
110 cord_individual_obj[indivial_i,:] = [15. 9. 92. 101.]
111 cord_individual_obj[indivial_i,:] = [16. 9. 73. 82.]
112 cord_individual_obj[indivial_i,:] = [17. 9. 68. 77.]
113 cord_individual_obj[indivial_i,:] = [18. 9. 84. 93.]
114 cord_individual_obj[indivial_i,:] = [19. 9. 74. 83.]
115 cord_individual_obj[indivial_i,:] = [20. 8. 72. 80.]
116 cord_individual_obj[indivial_i,:] = [21. 7. 79. 86.]
117 cord_individual_obj[indivial_i,:] = [22. 10. 87. 97.]
118 cord_individual_obj[indivial_i,:] = [23. 8. 62. 70.]
119 cord_individual_obj[indivial_i,:] = [24. 10. 86. 96.]
120
121 min(cord_individual_obj[:,3]) = 61.0
122 historl_G_best_iter[iter, 3] = 61.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 9. 52. 61.]
127 cord_individual_obj[indivial_i,:] = [ 1. 11. 125. 136.]
128 cord_individual_obj[indivial_i,:] = [ 2. 11. 133. 144.]
129 cord_individual_obj[indivial_i,:] = [ 3. 9. 101. 110.]
130 cord_individual_obj[indivial_i,:] = [ 4. 10. 149. 159.]
131 cord_individual_obj[indivial_i,:] = [ 5. 10. 107. 117.]
132 cord_individual_obj[indivial_i,:] = [ 6. 9. 84. 93.]
133 cord_individual_obj[indivial_i,:] = [ 7. 8. 94. 102.]
134 cord_individual_obj[indivial_i,:] = [ 8. 10. 106. 116.]
135 cord_individual_obj[indivial_i,:] = [ 9. 7. 107. 114.]
136 cord_individual_obj[indivial_i,:] = [10. 8. 90. 98.]
137 cord_individual_obj[indivial_i,:] = [11. 10. 80. 90.]
138 cord_individual_obj[indivial_i,:] = [12. 10. 120. 130.]
139 cord_individual_obj[indivial_i,:] = [13. 7. 104. 111.]
140 cord_individual_obj[indivial_i,:] = [14. 8. 117. 125.]
141 cord_individual_obj[indivial_i,:] = [15. 9. 114. 123.]
142 cord_individual_obj[indivial_i,:] = [16. 8. 104. 112.]
143 cord_individual_obj[indivial_i,:] = [17. 8. 88. 96.]
144 cord_individual_obj[indivial_i,:] = [18. 11. 129. 140.]
145 cord_individual_obj[indivial_i,:] = [19. 11. 164. 175.]
146 cord_individual_obj[indivial_i,:] = [20. 8. 96. 104.]
147 cord_individual_obj[indivial_i,:] = [21. 9. 145. 154.]
148 cord_individual_obj[indivial_i,:] = [22. 10. 96. 106.]
149 cord_individual_obj[indivial_i,:] = [23. 9. 122. 131.]
150 cord_individual_obj[indivial_i,:] = [24. 9. 120. 129.]
151
152 min(cord_individual_obj[:,3]) = 61.0
153 historl_G_best_iter[iter, 3] = 61.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 9. 137. 146.]
158 cord_individual_obj[indivial_i,:] = [ 1. 10. 158. 168.]
159 cord_individual_obj[indivial_i,:] = [ 2. 11. 119. 130.]
160 cord_individual_obj[indivial_i,:] = [ 3. 7. 92. 99.]
161 cord_individual_obj[indivial_i,:] = [ 4. 13. 121. 134.]
162 cord_individual_obj[indivial_i,:] = [ 5. 9. 84. 93.]
163 cord_individual_obj[indivial_i,:] = [ 6. 10. 91. 101.]

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164 cord_individual_obj[indivial_i, :] = [ 7. 9. 97. 106.]
165 cord_individual_obj[indivial_i, :] = [ 8. 9. 95. 104.]
166 cord_individual_obj[indivial_i, :] = [ 9. 9. 115. 124.]
167 cord_individual_obj[indivial_i, :] = [10. 9. 70. 79.]
168 cord_individual_obj[indivial_i, :] = [11. 8. 84. 92.]
169 cord_individual_obj[indivial_i, :] = [12. 9. 104. 113.]
170 cord_individual_obj[indivial_i, :] = [13. 9. 129. 138.]
171 cord_individual_obj[indivial_i, :] = [14. 9. 73. 82.]
172 cord_individual_obj[indivial_i, :] = [15. 7. 120. 127.]
173 cord_individual_obj[indivial_i, :] = [16. 7. 115. 122.]
174 cord_individual_obj[indivial_i, :] = [17. 9. 93. 102.]
175 cord_individual_obj[indivial_i, :] = [18. 9. 123. 132.]
176 cord_individual_obj[indivial_i, :] = [19. 9. 52. 61.]
177 cord_individual_obj[indivial_i, :] = [20. 8. 92. 100.]
178 cord_individual_obj[indivial_i, :] = [21. 8. 119. 127.]
179 cord_individual_obj[indivial_i, :] = [22. 12. 77. 89.]
180 cord_individual_obj[indivial_i, :] = [23. 9. 82. 91.]
181 cord_individual_obj[indivial_i, :] = [24. 10. 100. 110.]
182
183 min(cord_individual_obj[:, 3]) = 61.0
184 historl_G_best_iter[iter, 3] = 61.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i, :] = [ 0. 9. 149. 158.]
189 cord_individual_obj[indivial_i, :] = [ 1. 9. 52. 61.]
190 cord_individual_obj[indivial_i, :] = [ 2. 8. 100. 108.]
191 cord_individual_obj[indivial_i, :] = [ 3. 12. 125. 137.]
192 cord_individual_obj[indivial_i, :] = [ 4. 11. 124. 135.]
193 cord_individual_obj[indivial_i, :] = [ 5. 12. 98. 110.]
194 cord_individual_obj[indivial_i, :] = [ 6. 11. 85. 96.]
195 cord_individual_obj[indivial_i, :] = [ 7. 10. 129. 139.]
196 cord_individual_obj[indivial_i, :] = [ 8. 9. 118. 127.]
197 cord_individual_obj[indivial_i, :] = [ 9. 8. 179. 187.]
198 cord_individual_obj[indivial_i, :] = [10. 8. 70. 78.]
199 cord_individual_obj[indivial_i, :] = [11. 11. 93. 104.]
200 cord_individual_obj[indivial_i, :] = [12. 11. 94. 105.]
201 cord_individual_obj[indivial_i, :] = [13. 10. 101. 111.]
202 cord_individual_obj[indivial_i, :] = [14. 9. 107. 116.]
203 cord_individual_obj[indivial_i, :] = [15. 9. 97. 106.]
204 cord_individual_obj[indivial_i, :] = [16. 11. 134. 145.]
205 cord_individual_obj[indivial_i, :] = [17. 7. 84. 91.]
206 cord_individual_obj[indivial_i, :] = [18. 12. 104. 116.]
207 cord_individual_obj[indivial_i, :] = [19. 11. 185. 196.]
208 cord_individual_obj[indivial_i, :] = [20. 8. 130. 138.]
209 cord_individual_obj[indivial_i, :] = [21. 11. 95. 106.]
210 cord_individual_obj[indivial_i, :] = [22. 12. 148. 160.]
211 cord_individual_obj[indivial_i, :] = [23. 8. 102. 110.]
212 cord_individual_obj[indivial_i, :] = [24. 7. 92. 99.]
213
214 min(cord_individual_obj[:, 3]) = 61.0
215 historl_G_best_iter[iter, 3] = 61.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i, :] = [ 0. 9. 95. 104.]
220 cord_individual_obj[indivial_i, :] = [ 1. 11. 122. 133.]
221 cord_individual_obj[indivial_i, :] = [ 2. 9. 107. 116.]
222 cord_individual_obj[indivial_i, :] = [ 3. 10. 100. 110.]
223 cord_individual_obj[indivial_i, :] = [ 4. 8. 126. 134.]
224 cord_individual_obj[indivial_i, :] = [ 5. 11. 154. 165.]
225 cord_individual_obj[indivial_i, :] = [ 6. 8. 107. 115.]
226 cord_individual_obj[indivial_i, :] = [ 7. 8. 108. 116.]
227 cord_individual_obj[indivial_i, :] = [ 8. 10. 129. 139.]
228 cord_individual_obj[indivial_i, :] = [ 9. 9. 139. 148.]
229 cord_individual_obj[indivial_i, :] = [10. 7. 63. 70.]
230 cord_individual_obj[indivial_i, :] = [11. 9. 99. 108.]
231 cord_individual_obj[indivial_i, :] = [12. 10. 147. 157.]
232 cord_individual_obj[indivial_i, :] = [13. 9. 115. 124.]
233 cord_individual_obj[indivial_i, :] = [14. 9. 148. 157.]
234 cord_individual_obj[indivial_i, :] = [15. 11. 114. 125.]
235 cord_individual_obj[indivial_i, :] = [16. 11. 115. 126.]
236 cord_individual_obj[indivial_i, :] = [17. 8. 88. 96.]
237 cord_individual_obj[indivial_i, :] = [18. 10. 143. 153.]
238 cord_individual_obj[indivial_i, :] = [19. 9. 52. 61.]
239 cord_individual_obj[indivial_i, :] = [20. 7. 113. 120.]
240 cord_individual_obj[indivial_i, :] = [21. 10. 88. 98.]
241 cord_individual_obj[indivial_i, :] = [22. 11. 115. 126.]
242 cord_individual_obj[indivial_i, :] = [23. 10. 96. 106.]
243 cord_individual_obj[indivial_i, :] = [24. 12. 89. 101.]
244
245 min(cord_individual_obj[:, 3]) = 61.0
246 historl_G_best_iter[iter, 3] = 61.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0. 12. 166. 178.]
251 cord_individual_obj[indivial_i, :] = [ 1. 10. 126. 136.]
252 cord_individual_obj[indivial_i, :] = [ 2. 12. 119. 131.]
253 cord_individual_obj[indivial_i, :] = [ 3. 10. 106. 116.]
254 cord_individual_obj[indivial_i, :] = [ 4. 11. 114. 125.]
255 cord_individual_obj[indivial_i, :] = [ 5. 9. 52. 61.]
256 cord_individual_obj[indivial_i, :] = [ 6. 9. 99. 108.]
257 cord_individual_obj[indivial_i, :] = [ 7. 10. 97. 107.]
258 cord_individual_obj[indivial_i, :] = [ 8. 9. 100. 109.]
259 cord_individual_obj[indivial_i, :] = [ 9. 8. 112. 120.]
260 cord_individual_obj[indivial_i, :] = [ 10. 11. 127. 138.]
261 cord_individual_obj[indivial_i, :] = [ 11. 10. 116. 126.]
262 cord_individual_obj[indivial_i, :] = [ 12. 11. 158. 169.]
263 cord_individual_obj[indivial_i, :] = [ 13. 9. 140. 149.]
264 cord_individual_obj[indivial_i, :] = [ 14. 9. 123. 132.]
265 cord_individual_obj[indivial_i, :] = [ 15. 8. 81. 89.]
266 cord_individual_obj[indivial_i, :] = [ 16. 10. 83. 93.]
267 cord_individual_obj[indivial_i, :] = [ 17. 13. 181. 194.]
268 cord_individual_obj[indivial_i, :] = [ 18. 11. 110. 121.]
269 cord_individual_obj[indivial_i, :] = [ 19. 11. 185. 196.]
270 cord_individual_obj[indivial_i, :] = [ 20. 9. 77. 86.]
271 cord_individual_obj[indivial_i, :] = [ 21. 9. 95. 104.]
272 cord_individual_obj[indivial_i, :] = [ 22. 12. 174. 186.]
273 cord_individual_obj[indivial_i, :] = [ 23. 9. 115. 124.]
274 cord_individual_obj[indivial_i, :] = [ 24. 10. 122. 132.]
275

276 min(cord_individual_obj[:, 3]) = 61.0
277 historl_G_best_iter[iter, 3] = 61.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0. 9. 126. 135.]
282 cord_individual_obj[indivial_i, :] = [ 1. 10. 135. 145.]
283 cord_individual_obj[indivial_i, :] = [ 2. 10. 122. 132.]
284 cord_individual_obj[indivial_i, :] = [ 3. 12. 166. 178.]
285 cord_individual_obj[indivial_i, :] = [ 4. 10. 134. 144.]
286 cord_individual_obj[indivial_i, :] = [ 5. 12. 101. 113.]
287 cord_individual_obj[indivial_i, :] = [ 6. 9. 127. 136.]
288 cord_individual_obj[indivial_i, :] = [ 7. 8. 133. 141.]
289 cord_individual_obj[indivial_i, :] = [ 8. 9. 145. 154.]
290 cord_individual_obj[indivial_i, :] = [ 9. 9. 107. 116.]
291 cord_individual_obj[indivial_i, :] = [ 10. 7. 85. 92.]
292 cord_individual_obj[indivial_i, :] = [ 11. 12. 93. 105.]
293 cord_individual_obj[indivial_i, :] = [ 12. 11. 148. 159.]
294 cord_individual_obj[indivial_i, :] = [ 13. 9. 93. 102.]
295 cord_individual_obj[indivial_i, :] = [ 14. 9. 139. 148.]
296 cord_individual_obj[indivial_i, :] = [ 15. 9. 101. 110.]
297 cord_individual_obj[indivial_i, :] = [ 16. 11. 131. 142.]
298 cord_individual_obj[indivial_i, :] = [ 17. 11. 99. 110.]
299 cord_individual_obj[indivial_i, :] = [ 18. 11. 130. 141.]
300 cord_individual_obj[indivial_i, :] = [ 19. 9. 52. 61.]
301 cord_individual_obj[indivial_i, :] = [ 20. 9. 128. 137.]
302 cord_individual_obj[indivial_i, :] = [ 21. 11. 124. 135.]
303 cord_individual_obj[indivial_i, :] = [ 22. 12. 144. 156.]
304 cord_individual_obj[indivial_i, :] = [ 23. 11. 118. 129.]
305 cord_individual_obj[indivial_i, :] = [ 24. 9. 124. 133.]
306

307 min(cord_individual_obj[:, 3]) = 61.0
308 historl_G_best_iter[iter, 3] = 61.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0. 9. 124. 133.]
313 cord_individual_obj[indivial_i, :] = [ 1. 10. 118. 128.]
314 cord_individual_obj[indivial_i, :] = [ 2. 9. 160. 169.]
315 cord_individual_obj[indivial_i, :] = [ 3. 9. 52. 61.]
316 cord_individual_obj[indivial_i, :] = [ 4. 11. 149. 160.]
317 cord_individual_obj[indivial_i, :] = [ 5. 10. 136. 146.]
318 cord_individual_obj[indivial_i, :] = [ 6. 9. 109. 118.]
319 cord_individual_obj[indivial_i, :] = [ 7. 11. 140. 151.]
320 cord_individual_obj[indivial_i, :] = [ 8. 10. 118. 128.]
321 cord_individual_obj[indivial_i, :] = [ 9. 9. 132. 141.]
322 cord_individual_obj[indivial_i, :] = [ 10. 8. 104. 112.]
323 cord_individual_obj[indivial_i, :] = [ 11. 11. 93. 104.]
324 cord_individual_obj[indivial_i, :] = [ 12. 11. 100. 111.]
325 cord_individual_obj[indivial_i, :] = [ 13. 9. 121. 130.]
326 cord_individual_obj[indivial_i, :] = [ 14. 9. 104. 113.]
327 cord_individual_obj[indivial_i, :] = [ 15. 9. 100. 109.]
328 cord_individual_obj[indivial_i, :] = [ 16. 12. 149. 161.]
329 cord_individual_obj[indivial_i, :] = [ 17. 11. 90. 101.]
330 cord_individual_obj[indivial_i, :] = [ 18. 10. 177. 187.]
331 cord_individual_obj[indivial_i, :] = [ 19. 11. 185. 196.]

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332 cord_individual_obj[indivial_i,:] = [ 20.  8. 103. 111.]
333 cord_individual_obj[indivial_i,:] = [ 21. 11. 120. 131.]
334 cord_individual_obj[indivial_i,:] = [ 22. 12. 148. 160.]
335 cord_individual_obj[indivial_i,:] = [ 23. 9. 90. 99.]
336 cord_individual_obj[indivial_i,:] = [ 24. 11. 125. 136.]
337
338 min(cord_individual_obj[:,3]) = 61.0
339 histol_G_best_iter[iter,3] = 61.0
340 Begin iteration:
341
342 iter = 10
343 cord_individual_obj[indivial_i,:] = [ 0. 10. 114. 124.]
344 cord_individual_obj[indivial_i,:] = [ 1. 12. 112. 124.]
345 cord_individual_obj[indivial_i,:] = [ 2. 8. 122. 130.]
346 cord_individual_obj[indivial_i,:] = [ 3. 12. 127. 139.]
347 cord_individual_obj[indivial_i,:] = [ 4. 9. 121. 130.]
348 cord_individual_obj[indivial_i,:] = [ 5. 11. 132. 143.]
349 cord_individual_obj[indivial_i,:] = [ 6. 8. 83. 91.]
350 cord_individual_obj[indivial_i,:] = [ 7. 11. 135. 146.]
351 cord_individual_obj[indivial_i,:] = [ 8. 9. 162. 171.]
352 cord_individual_obj[indivial_i,:] = [ 9. 8. 134. 142.]
353 cord_individual_obj[indivial_i,:] = [10. 8. 68. 76.]
354 cord_individual_obj[indivial_i,:] = [11. 10. 114. 124.]
355 cord_individual_obj[indivial_i,:] = [12. 10. 140. 150.]
356 cord_individual_obj[indivial_i,:] = [13. 9. 100. 109.]
357 cord_individual_obj[indivial_i,:] = [14. 8. 172. 180.]
358 cord_individual_obj[indivial_i,:] = [15. 9. 128. 137.]
359 cord_individual_obj[indivial_i,:] = [16. 8. 83. 91.]
360 cord_individual_obj[indivial_i,:] = [17. 8. 85. 93.]
361 cord_individual_obj[indivial_i,:] = [18. 9. 148. 157.]
362 cord_individual_obj[indivial_i,:] = [19. 9. 52. 61.]
363 cord_individual_obj[indivial_i,:] = [20. 8. 107. 115.]
364 cord_individual_obj[indivial_i,:] = [21. 10. 125. 135.]
365 cord_individual_obj[indivial_i,:] = [22. 10. 130. 140.]
366 cord_individual_obj[indivial_i,:] = [23. 9. 108. 117.]
367 cord_individual_obj[indivial_i,:] = [24. 8. 98. 106.]
368
369 min(cord_individual_obj[:,3]) = 61.0
370 histol_G_best_iter[iter,3] = 61.0
371 Begin iteration:
372
373 iter = 11
374 cord_individual_obj[indivial_i,:] = [ 0. 10. 122. 132.]
375 cord_individual_obj[indivial_i,:] = [ 1. 10. 100. 110.]
376 cord_individual_obj[indivial_i,:] = [ 2. 10. 99. 109.]
377 cord_individual_obj[indivial_i,:] = [ 3. 9. 113. 122.]
378 cord_individual_obj[indivial_i,:] = [ 4. 12. 124. 136.]
379 cord_individual_obj[indivial_i,:] = [ 5. 10. 100. 110.]
380 cord_individual_obj[indivial_i,:] = [ 6. 10. 71. 81.]
381 cord_individual_obj[indivial_i,:] = [ 7. 10. 125. 135.]
382 cord_individual_obj[indivial_i,:] = [ 8. 9. 102. 111.]
383 cord_individual_obj[indivial_i,:] = [ 9. 8. 121. 129.]
384 cord_individual_obj[indivial_i,:] = [10. 10. 88. 98.]
385 cord_individual_obj[indivial_i,:] = [11. 10. 97. 107.]
386 cord_individual_obj[indivial_i,:] = [12. 9. 123. 132.]
387 cord_individual_obj[indivial_i,:] = [13. 9. 112. 121.]
388 cord_individual_obj[indivial_i,:] = [14. 9. 52. 61.]
389 cord_individual_obj[indivial_i,:] = [15. 8. 81. 89.]
390 cord_individual_obj[indivial_i,:] = [16. 11. 114. 125.]
391 cord_individual_obj[indivial_i,:] = [17. 10. 72. 82.]
392 cord_individual_obj[indivial_i,:] = [18. 12. 143. 155.]
393 cord_individual_obj[indivial_i,:] = [19. 11. 185. 196.]
394 cord_individual_obj[indivial_i,:] = [20. 7. 99. 106.]
395 cord_individual_obj[indivial_i,:] = [21. 10. 142. 152.]
396 cord_individual_obj[indivial_i,:] = [22. 10. 77. 87.]
397 cord_individual_obj[indivial_i,:] = [23. 9. 95. 104.]
398 cord_individual_obj[indivial_i,:] = [24. 9. 74. 83.]
399
400 min(cord_individual_obj[:,3]) = 61.0
401 histol_G_best_iter[iter,3] = 61.0
402 Begin iteration:
403
404 iter = 12
405 cord_individual_obj[indivial_i,:] = [ 0. 12. 79. 91.]
406 cord_individual_obj[indivial_i,:] = [ 1. 9. 110. 119.]
407 cord_individual_obj[indivial_i,:] = [ 2. 8. 133. 141.]
408 cord_individual_obj[indivial_i,:] = [ 3. 10. 94. 104.]
409 cord_individual_obj[indivial_i,:] = [ 4. 11. 139. 150.]
410 cord_individual_obj[indivial_i,:] = [ 5. 10. 72. 82.]
411 cord_individual_obj[indivial_i,:] = [ 6. 10. 154. 164.]
412 cord_individual_obj[indivial_i,:] = [ 7. 9. 65. 74.]
413 cord_individual_obj[indivial_i,:] = [ 8. 9. 172. 181.]
414 cord_individual_obj[indivial_i,:] = [ 9. 9. 135. 144.]
415 cord_individual_obj[indivial_i,:] = [10. 8. 80. 88.]

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416 cord_individual_obj[indivial_i,:] = [ 11. 12. 141. 153.]
417 cord_individual_obj[indivial_i,:] = [ 12. 11. 100. 111.]
418 cord_individual_obj[indivial_i,:] = [ 13. 8. 115. 123.]
419 cord_individual_obj[indivial_i,:] = [ 14. 9. 104. 113.]
420 cord_individual_obj[indivial_i,:] = [ 15. 11. 181. 192.]
421 cord_individual_obj[indivial_i,:] = [16. 10. 86. 96.]
422 cord_individual_obj[indivial_i,:] = [17. 9. 90. 99.]
423 cord_individual_obj[indivial_i,:] = [18. 11. 108. 119.]
424 cord_individual_obj[indivial_i,:] = [19. 9. 52. 61.]
425 cord_individual_obj[indivial_i,:] = [20. 11. 144. 155.]
426 cord_individual_obj[indivial_i,:] = [21. 10. 233. 243.]
427 cord_individual_obj[indivial_i,:] = [22. 10. 126. 136.]
428 cord_individual_obj[indivial_i,:] = [23. 9. 81. 90.]
429 cord_individual_obj[indivial_i,:] = [24. 10. 92. 102.]
430
431 min(cord_individual_obj[:,3]) = 61.0
432 histol_G_best_iter[iter,3] = 61.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [ 0. 8. 111. 119.]
437 cord_individual_obj[indivial_i,:] = [ 1. 9. 67. 76.]
438 cord_individual_obj[indivial_i,:] = [ 2. 9. 79. 88.]
439 cord_individual_obj[indivial_i,:] = [ 3. 8. 88. 96.]
440 cord_individual_obj[indivial_i,:] = [ 4. 9. 90. 99.]
441 cord_individual_obj[indivial_i,:] = [ 5. 11. 117. 128.]
442 cord_individual_obj[indivial_i,:] = [ 6. 12. 110. 122.]
443 cord_individual_obj[indivial_i,:] = [ 7. 8. 81. 89.]
444 cord_individual_obj[indivial_i,:] = [ 8. 9. 58. 67.]
445 cord_individual_obj[indivial_i,:] = [ 9. 9. 43. 52.]
446 cord_individual_obj[indivial_i,:] = [10. 8. 113. 121.]
447 cord_individual_obj[indivial_i,:] = [11. 11. 110. 121.]
448 cord_individual_obj[indivial_i,:] = [12. 11. 136. 147.]
449 cord_individual_obj[indivial_i,:] = [13. 7. 96. 103.]
450 cord_individual_obj[indivial_i,:] = [14. 9. 69. 78.]
451 cord_individual_obj[indivial_i,:] = [15. 8. 75. 83.]
452 cord_individual_obj[indivial_i,:] = [16. 9. 100. 109.]
453 cord_individual_obj[indivial_i,:] = [17. 11. 132. 143.]
454 cord_individual_obj[indivial_i,:] = [18. 10. 124. 134.]
455 cord_individual_obj[indivial_i,:] = [19. 11. 185. 196.]
456 cord_individual_obj[indivial_i,:] = [20. 7. 118. 125.]
457 cord_individual_obj[indivial_i,:] = [21. 9. 52. 61.]
458 cord_individual_obj[indivial_i,:] = [22. 8. 73. 81.]
459 cord_individual_obj[indivial_i,:] = [23. 8. 101. 109.]
460 cord_individual_obj[indivial_i,:] = [24. 9. 77. 86.]
461
462 min(cord_individual_obj[:,3]) = 52.0
463 histol_G_best_iter[iter,3] = 52.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [ 0. 7. 89. 96.]
468 cord_individual_obj[indivial_i,:] = [ 1. 11. 87. 98.]
469 cord_individual_obj[indivial_i,:] = [ 2. 9. 105. 114.]
470 cord_individual_obj[indivial_i,:] = [ 3. 11. 120. 131.]
471 cord_individual_obj[indivial_i,:] = [ 4. 8. 84. 92.]
472 cord_individual_obj[indivial_i,:] = [ 5. 10. 93. 103.]
473 cord_individual_obj[indivial_i,:] = [ 6. 7. 87. 94.]
474 cord_individual_obj[indivial_i,:] = [ 7. 8. 101. 109.]
475 cord_individual_obj[indivial_i,:] = [ 8. 10. 113. 123.]
476 cord_individual_obj[indivial_i,:] = [ 9. 10. 89. 99.]
477 cord_individual_obj[indivial_i,:] = [10. 9. 66. 75.]
478 cord_individual_obj[indivial_i,:] = [11. 8. 74. 82.]
479 cord_individual_obj[indivial_i,:] = [12. 7. 109. 116.]
480 cord_individual_obj[indivial_i,:] = [13. 10. 138. 148.]
481 cord_individual_obj[indivial_i,:] = [14. 8. 102. 110.]
482 cord_individual_obj[indivial_i,:] = [15. 8. 101. 109.]
483 cord_individual_obj[indivial_i,:] = [16. 8. 95. 103.]
484 cord_individual_obj[indivial_i,:] = [17. 8. 80. 88.]
485 cord_individual_obj[indivial_i,:] = [18. 10. 79. 89.]
486 cord_individual_obj[indivial_i,:] = [19. 9. 43. 52.]
487 cord_individual_obj[indivial_i,:] = [20. 8. 99. 107.]
488 cord_individual_obj[indivial_i,:] = [21. 11. 168. 179.]
489 cord_individual_obj[indivial_i,:] = [22. 10. 97. 107.]
490 cord_individual_obj[indivial_i,:] = [23. 8. 92. 100.]
491 cord_individual_obj[indivial_i,:] = [24. 8. 91. 99.]
492
493 min(cord_individual_obj[:,3]) = 52.0
494 histol_G_best_iter[iter,3] = 52.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [ 0. 9. 86. 95.]
499 cord_individual_obj[indivial_i,:] = [ 1. 10. 65. 75.]

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500 cord_individual_obj[indivial_i,:] = [ 2. 8. 76. 84.]
501 cord_individual_obj[indivial_i,:] = [ 3. 9. 100. 109.]
502 cord_individual_obj[indivial_i,:] = [ 4. 9. 118. 127.]
503 cord_individual_obj[indivial_i,:] = [ 5. 12. 82. 94.]
504 cord_individual_obj[indivial_i,:] = [ 6. 8. 78. 86.]
505 cord_individual_obj[indivial_i,:] = [ 7. 7. 136. 143.]
506 cord_individual_obj[indivial_i,:] = [ 8. 11. 94. 105.]
507 cord_individual_obj[indivial_i,:] = [ 9. 9. 124. 133.]
508 cord_individual_obj[indivial_i,:] = [ 10. 9. 104. 113.]
509 cord_individual_obj[indivial_i,:] = [ 11. 9. 105. 114.]
510 cord_individual_obj[indivial_i,:] = [ 12. 9. 76. 85.]
511 cord_individual_obj[indivial_i,:] = [ 13. 8. 141. 149.]
512 cord_individual_obj[indivial_i,:] = [ 14. 8. 132. 140.]
513 cord_individual_obj[indivial_i,:] = [ 15. 7. 87. 94.]
514 cord_individual_obj[indivial_i,:] = [ 16. 9. 88. 97.]
515 cord_individual_obj[indivial_i,:] = [ 17. 9. 125. 134.]
516 cord_individual_obj[indivial_i,:] = [ 18. 10. 65. 75.]
517 cord_individual_obj[indivial_i,:] = [ 19. 9. 107. 116.]
518 cord_individual_obj[indivial_i,:] = [ 20. 8. 118. 126.]
519 cord_individual_obj[indivial_i,:] = [ 21. 9. 43. 52.]
520 cord_individual_obj[indivial_i,:] = [ 22. 9. 107. 116.]
521 cord_individual_obj[indivial_i,:] = [ 23. 9. 113. 122.]
522 cord_individual_obj[indivial_i,:] = [ 24. 10. 82. 92.]
523
524 min(cord_individual_obj[:, 3]) = 52.0
525 histort_G_best_iter[iter, 3] = 52.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i,:] = [ 0. 8. 112. 120.]
530 cord_individual_obj[indivial_i,:] = [ 1. 9. 83. 92.]
531 cord_individual_obj[indivial_i,:] = [ 2. 9. 96. 105.]
532 cord_individual_obj[indivial_i,:] = [ 3. 9. 93. 102.]
533 cord_individual_obj[indivial_i,:] = [ 4. 7. 80. 87.]
534 cord_individual_obj[indivial_i,:] = [ 5. 8. 116. 124.]
535 cord_individual_obj[indivial_i,:] = [ 6. 10. 111. 121.]
536 cord_individual_obj[indivial_i,:] = [ 7. 9. 96. 105.]
537 cord_individual_obj[indivial_i,:] = [ 8. 11. 82. 93.]
538 cord_individual_obj[indivial_i,:] = [ 9. 9. 111. 120.]
539 cord_individual_obj[indivial_i,:] = [ 10. 8. 121. 129.]
540 cord_individual_obj[indivial_i,:] = [ 11. 8. 82. 90.]
541 cord_individual_obj[indivial_i,:] = [ 12. 9. 108. 117.]
542 cord_individual_obj[indivial_i,:] = [ 13. 9. 43. 52.]
543 cord_individual_obj[indivial_i,:] = [ 14. 9. 128. 137.]
544 cord_individual_obj[indivial_i,:] = [ 15. 8. 128. 136.]
545 cord_individual_obj[indivial_i,:] = [ 16. 8. 116. 124.]
546 cord_individual_obj[indivial_i,:] = [ 17. 8. 99. 107.]
547 cord_individual_obj[indivial_i,:] = [ 18. 7. 124. 131.]
548 cord_individual_obj[indivial_i,:] = [ 19. 8. 115. 123.]
549 cord_individual_obj[indivial_i,:] = [ 20. 8. 81. 89.]
550 cord_individual_obj[indivial_i,:] = [ 21. 11. 113. 124.]
551 cord_individual_obj[indivial_i,:] = [ 22. 10. 87. 97.]
552 cord_individual_obj[indivial_i,:] = [ 23. 8. 97. 105.]
553 cord_individual_obj[indivial_i,:] = [ 24. 8. 93. 101.]
554
555 min(cord_individual_obj[:, 3]) = 52.0
556 histort_G_best_iter[iter, 3] = 52.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i,:] = [ 0. 10. 117. 127.]
561 cord_individual_obj[indivial_i,:] = [ 1. 10. 154. 164.]
562 cord_individual_obj[indivial_i,:] = [ 2. 10. 153. 163.]
563 cord_individual_obj[indivial_i,:] = [ 3. 9. 127. 136.]
564 cord_individual_obj[indivial_i,:] = [ 4. 10. 117. 127.]
565 cord_individual_obj[indivial_i,:] = [ 5. 10. 102. 112.]
566 cord_individual_obj[indivial_i,:] = [ 6. 8. 87. 95.]
567 cord_individual_obj[indivial_i,:] = [ 7. 9. 94. 103.]
568 cord_individual_obj[indivial_i,:] = [ 8. 9. 84. 93.]
569 cord_individual_obj[indivial_i,:] = [ 9. 9. 77. 86.]
570 cord_individual_obj[indivial_i,:] = [ 10. 10. 88. 98.]
571 cord_individual_obj[indivial_i,:] = [ 11. 9. 95. 104.]
572 cord_individual_obj[indivial_i,:] = [ 12. 8. 101. 109.]
573 cord_individual_obj[indivial_i,:] = [ 13. 8. 104. 112.]
574 cord_individual_obj[indivial_i,:] = [ 14. 9. 43. 52.]
575 cord_individual_obj[indivial_i,:] = [ 15. 11. 92. 103.]
576 cord_individual_obj[indivial_i,:] = [ 16. 9. 88. 97.]
577 cord_individual_obj[indivial_i,:] = [ 17. 9. 94. 103.]
578 cord_individual_obj[indivial_i,:] = [ 18. 11. 123. 134.]
579 cord_individual_obj[indivial_i,:] = [ 19. 9. 108. 117.]
580 cord_individual_obj[indivial_i,:] = [ 20. 7. 80. 87.]
581 cord_individual_obj[indivial_i,:] = [ 21. 10. 100. 110.]
582 cord_individual_obj[indivial_i,:] = [ 22. 9. 92. 101.]
583 cord_individual_obj[indivial_i,:] = [ 23. 8. 135. 143.]

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unknown

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584     cord_individual_obj[indivial_i, :] = [24. 9. 88. 97.]
585
586     min(cord_individual_obj[:, 3]) = 52.0
587     historl_G_best_iter[iter, 3] = 52.0
588 Begin iteration:
589
590 iter = 18
591     cord_individual_obj[indivial_i, :] = [ 0. 8. 90. 98.]
592     cord_individual_obj[indivial_i, :] = [ 1. 9. 43. 52.]
593     cord_individual_obj[indivial_i, :] = [ 2. 9. 93. 102.]
594     cord_individual_obj[indivial_i, :] = [ 3. 9. 114. 123.]
595     cord_individual_obj[indivial_i, :] = [ 4. 9. 83. 92.]
596     cord_individual_obj[indivial_i, :] = [ 5. 9. 91. 100.]
597     cord_individual_obj[indivial_i, :] = [ 6. 8. 94. 102.]
598     cord_individual_obj[indivial_i, :] = [ 7. 8. 117. 125.]
599     cord_individual_obj[indivial_i, :] = [ 8. 9. 78. 87.]
600     cord_individual_obj[indivial_i, :] = [ 9. 9. 83. 92.]
601     cord_individual_obj[indivial_i, :] = [ 10. 9. 118. 127.]
602     cord_individual_obj[indivial_i, :] = [ 11. 9. 80. 89.]
603     cord_individual_obj[indivial_i, :] = [ 12. 8. 112. 120.]
604     cord_individual_obj[indivial_i, :] = [ 13. 8. 122. 130.]
605     cord_individual_obj[indivial_i, :] = [ 14. 8. 100. 108.]
606     cord_individual_obj[indivial_i, :] = [ 15. 8. 109. 117.]
607     cord_individual_obj[indivial_i, :] = [ 16. 7. 105. 112.]
608     cord_individual_obj[indivial_i, :] = [ 17. 9. 89. 98.]
609     cord_individual_obj[indivial_i, :] = [ 18. 9. 82. 91.]
610     cord_individual_obj[indivial_i, :] = [ 19. 9. 123. 132.]
611     cord_individual_obj[indivial_i, :] = [ 20. 9. 91. 100.]
612     cord_individual_obj[indivial_i, :] = [ 21. 9. 116. 125.]
613     cord_individual_obj[indivial_i, :] = [ 22. 7. 111. 118.]
614     cord_individual_obj[indivial_i, :] = [ 23. 8. 120. 128.]
615     cord_individual_obj[indivial_i, :] = [ 24. 9. 109. 118.]
616
617     min(cord_individual_obj[:, 3]) = 52.0
618     historl_G_best_iter[iter, 3] = 52.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0. 8. 144. 152.]
623     cord_individual_obj[indivial_i, :] = [ 1. 11. 104. 115.]
624     cord_individual_obj[indivial_i, :] = [ 2. 9. 76. 85.]
625     cord_individual_obj[indivial_i, :] = [ 3. 11. 87. 98.]
626     cord_individual_obj[indivial_i, :] = [ 4. 10. 91. 101.]
627     cord_individual_obj[indivial_i, :] = [ 5. 9. 104. 113.]
628     cord_individual_obj[indivial_i, :] = [ 6. 9. 109. 118.]
629     cord_individual_obj[indivial_i, :] = [ 7. 8. 91. 99.]
630     cord_individual_obj[indivial_i, :] = [ 8. 8. 142. 150.]
631     cord_individual_obj[indivial_i, :] = [ 9. 9. 111. 120.]
632     cord_individual_obj[indivial_i, :] = [ 10. 10. 75. 85.]
633     cord_individual_obj[indivial_i, :] = [ 11. 8. 74. 82.]
634     cord_individual_obj[indivial_i, :] = [ 12. 11. 81. 92.]
635     cord_individual_obj[indivial_i, :] = [ 13. 7. 90. 97.]
636     cord_individual_obj[indivial_i, :] = [ 14. 9. 99. 108.]
637     cord_individual_obj[indivial_i, :] = [ 15. 8. 70. 78.]
638     cord_individual_obj[indivial_i, :] = [ 16. 9. 67. 76.]
639     cord_individual_obj[indivial_i, :] = [ 17. 9. 92. 101.]
640     cord_individual_obj[indivial_i, :] = [ 18. 8. 142. 150.]
641     cord_individual_obj[indivial_i, :] = [ 19. 9. 43. 52.]
642     cord_individual_obj[indivial_i, :] = [ 20. 7. 112. 119.]
643     cord_individual_obj[indivial_i, :] = [ 21. 9. 67. 76.]
644     cord_individual_obj[indivial_i, :] = [ 22. 8. 107. 115.]
645     cord_individual_obj[indivial_i, :] = [ 23. 9. 126. 135.]
646     cord_individual_obj[indivial_i, :] = [ 24. 9. 126. 135.]
647
648     min(cord_individual_obj[:, 3]) = 52.0
649     historl_G_best_iter[iter, 3] = 52.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0. 9. 43. 52.]
654     cord_individual_obj[indivial_i, :] = [ 1. 9. 123. 132.]
655     cord_individual_obj[indivial_i, :] = [ 2. 10. 71. 81.]
656     cord_individual_obj[indivial_i, :] = [ 3. 10. 110. 120.]
657     cord_individual_obj[indivial_i, :] = [ 4. 8. 64. 72.]
658     cord_individual_obj[indivial_i, :] = [ 5. 9. 93. 102.]
659     cord_individual_obj[indivial_i, :] = [ 6. 7. 120. 127.]
660     cord_individual_obj[indivial_i, :] = [ 7. 8. 95. 103.]
661     cord_individual_obj[indivial_i, :] = [ 8. 10. 81. 91.]
662     cord_individual_obj[indivial_i, :] = [ 9. 8. 110. 118.]
663     cord_individual_obj[indivial_i, :] = [ 10. 9. 118. 127.]
664     cord_individual_obj[indivial_i, :] = [ 11. 10. 151. 161.]
665     cord_individual_obj[indivial_i, :] = [ 12. 7. 138. 145.]
666     cord_individual_obj[indivial_i, :] = [ 13. 8. 94. 102.]
667     cord_individual_obj[indivial_i, :] = [ 14. 11. 126. 137.]
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668 cord_individual_obj[indivial_i,:] = [15. 8. 86. 94.]
669 cord_individual_obj[indivial_i,:] = [16. 8. 92. 100.]
670 cord_individual_obj[indivial_i,:] = [17. 9. 84. 93.]
671 cord_individual_obj[indivial_i,:] = [18. 10. 85. 95.]
672 cord_individual_obj[indivial_i,:] = [19. 8. 103. 111.]
673 cord_individual_obj[indivial_i,:] = [20. 11. 136. 147.]
674 cord_individual_obj[indivial_i,:] = [21. 10. 101. 111.]
675 cord_individual_obj[indivial_i,:] = [22. 9. 134. 143.]
676 cord_individual_obj[indivial_i,:] = [23. 8. 74. 82.]
677 cord_individual_obj[indivial_i,:] = [24. 10. 92. 102.]
678
679 min(cord_individual_obj[:, 3]) = 52.0
680 historl_G_best_iter[iter, 3] = 52.0
681 Iteration calculate over
682
683
684
685
686 All item are in Bin and:
687 Bin area = 1080
688 Real_area = 211.0
689 Proportion_of_area = 0.19537037037037036
690 BEST_CHROM =
691 berth: [3. 10. 13. 4. 21. 3.5 16. 21.5 19. 11.5 4.5 10.5 22.5]
692 time: [0. 0. 3. 6. 2. 2. 0. 5. 8. 6. 4. 1. 0.]
693 num_QC: [4. 4. 4. 5. 3. 3. 4. 3. 3. 2. 6. 5. 3.]
694 Objective function values and some other indicators:
695 Obj0 = 9.00 Obj1 = 43.00 Obj0 + Obj1 = 52.00
696 Total movement of crane: 0.00
697 Total waiting time in berth position: 37.00
698 Total index of q during berthing: 780.00
699 Specific arrangement for each vessel:
700 V_id: 0 li: 6.0 xi: 3.0 bow of i: 0.0 tail of i: 6.0 gama_i0: 0.0 gama_i1: 1.0
    work load gap_i: 0 gama_i1 + 1: 2.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work load_i:
701 V_id: 1 li: 8.0 xi: 10.0 bow of i: 6.0 tail of i: 14.0 gama_i0: 0.0 gama_i1: 0
    .0 gama_i1 + 1: 1.0 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: 2 li: 8.0 xi: 13.0 bow of i: 9.0 tail of i: 17.0 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: 140.0 work
    load_i: 140.0 work load gap_i: 0
703 V_id: 3 li: 8.0 xi: 4.0 bow of i: 0.0 tail of i: 8.0 gama_i0: 6.0 gama_i1: 7.0
    160.0 gama_i1 + 1: 8.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 160.0 work load_i:
    work load gap_i: 0
704 V_id: 4 li: 6.0 xi: 21.0 bow of i: 18.0 tail of i: 24.0 gama_i0: 2.0 gama_i1: 4
    .0 gama_i1 + 1: 5.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 160.0 work
    load_i: 160.0 work load gap_i: 0
705 V_id: 5 li: 7.0 xi: 3.5 bow of i: 0.0 tail of i: 7.0 gama_i0: 2.0 gama_i1: 3.0
    100.0 gama_i1 + 1: 4.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 100.0 work load_i:
    work load gap_i: 0
706 V_id: 6 li: 4.0 xi: 16.0 bow of i: 14.0 tail of i: 18.0 gama_i0: 0.0 gama_i1: 1
    .0 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
707 V_id: 7 li: 9.0 xi: 21.5 bow of i: 17.0 tail of i: 26.0 gama_i0: 5.0 gama_i1: 7
    .0 gama_i1 + 1: 8.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 140.0 work
    load_i: 140.0 work load gap_i: 0
708 V_id: 8 li: 8.0 xi: 19.0 bow of i: 15.0 tail of i: 23.0 gama_i0: 8.0 gama_i1: 9
    .0 gama_i1 + 1: 10.0 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
709 V_id: 9 li: 7.0 xi: 11.5 bow of i: 8.0 tail of i: 15.0 gama_i0: 6.0 gama_i1: 7
    .0 gama_i1 + 1: 8.0 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
710 V_id: 10 li: 9.0 xi: 4.5 bow of i: 0.0 tail of i: 9.0 gama_i0: 4.0 gama_i1: 5.0
    160.0 gama_i1 + 1: 6.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 160.0 work load_i:
    work load gap_i: 0
711 V_id: 11 li: 7.0 xi: 10.5 bow of i: 7.0 tail of i: 14.0 gama_i0: 1.0 gama_i1: 1
    : 2.0 gama_i1 + 1: 3.0 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
712 V_id: 12 li: 9.0 xi: 22.5 bow of i: 18.0 tail of i: 27.0 gama_i0: 0.0 gama_i1: 1
    : 1.0 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
713
714 Algorithm finished and the total CPU time: 346 s
715 End
716

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