

unknown

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80 cord_individual_obj[indivial_i,:] = [16. 8. 78. 86.]
81 cord_individual_obj[indivial_i,:] = [17. 9. 88. 97.]
82 cord_individual_obj[indivial_i,:] = [18. 6. 146. 152.]
83 cord_individual_obj[indivial_i,:] = [19. 6. 113. 119.]
84 cord_individual_obj[indivial_i,:] = [20. 9. 124. 133.]
85 cord_individual_obj[indivial_i,:] = [21. 9. 119. 128.]
86 cord_individual_obj[indivial_i,:] = [22. 5. 96. 101.]
87 cord_individual_obj[indivial_i,:] = [23. 10. 137. 147.]
88 cord_individual_obj[indivial_i,:] = [24. 8. 104. 112.]
89
90 min(cord_individual_obj[:,3]) = 64.0
91 historl_G_best_iter[iter,3] = 64.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 7. 101. 108.]
96 cord_individual_obj[indivial_i,:] = [ 1. 8. 110. 118.]
97 cord_individual_obj[indivial_i,:] = [ 2. 8. 52. 60.]
98 cord_individual_obj[indivial_i,:] = [ 3. 10. 179. 189.]
99 cord_individual_obj[indivial_i,:] = [ 4. 8. 136. 144.]
100 cord_individual_obj[indivial_i,:] = [ 5. 8. 75. 83.]
101 cord_individual_obj[indivial_i,:] = [ 6. 6. 80. 86.]
102 cord_individual_obj[indivial_i,:] = [ 7. 7. 91. 98.]
103 cord_individual_obj[indivial_i,:] = [ 8. 8. 97. 105.]
104 cord_individual_obj[indivial_i,:] = [ 9. 7. 81. 88.]
105 cord_individual_obj[indivial_i,:] = [10. 7. 115. 122.]
106 cord_individual_obj[indivial_i,:] = [11. 8. 58. 66.]
107 cord_individual_obj[indivial_i,:] = [12. 9. 79. 88.]
108 cord_individual_obj[indivial_i,:] = [13. 7. 94. 101.]
109 cord_individual_obj[indivial_i,:] = [14. 10. 112. 122.]
110 cord_individual_obj[indivial_i,:] = [15. 6. 105. 111.]
111 cord_individual_obj[indivial_i,:] = [16. 7. 88. 95.]
112 cord_individual_obj[indivial_i,:] = [17. 10. 134. 144.]
113 cord_individual_obj[indivial_i,:] = [18. 8. 56. 64.]
114 cord_individual_obj[indivial_i,:] = [19. 9. 112. 121.]
115 cord_individual_obj[indivial_i,:] = [20. 9. 131. 140.]
116 cord_individual_obj[indivial_i,:] = [21. 8. 116. 124.]
117 cord_individual_obj[indivial_i,:] = [22. 7. 173. 180.]
118 cord_individual_obj[indivial_i,:] = [23. 8. 137. 145.]
119 cord_individual_obj[indivial_i,:] = [24. 9. 102. 111.]
120
121 min(cord_individual_obj[:,3]) = 60.0
122 historl_G_best_iter[iter,3] = 60.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 6. 169. 175.]
127 cord_individual_obj[indivial_i,:] = [ 1. 7. 100. 107.]
128 cord_individual_obj[indivial_i,:] = [ 2. 7. 131. 138.]
129 cord_individual_obj[indivial_i,:] = [ 3. 8. 52. 60.]
130 cord_individual_obj[indivial_i,:] = [ 4. 9. 59. 68.]
131 cord_individual_obj[indivial_i,:] = [ 5. 10. 135. 145.]
132 cord_individual_obj[indivial_i,:] = [ 6. 7. 112. 119.]
133 cord_individual_obj[indivial_i,:] = [ 7. 8. 87. 95.]
134 cord_individual_obj[indivial_i,:] = [ 8. 8. 125. 133.]
135 cord_individual_obj[indivial_i,:] = [ 9. 8. 107. 115.]
136 cord_individual_obj[indivial_i,:] = [10. 7. 115. 122.]
137 cord_individual_obj[indivial_i,:] = [11. 6. 104. 110.]
138 cord_individual_obj[indivial_i,:] = [12. 8. 95. 103.]
139 cord_individual_obj[indivial_i,:] = [13. 7. 129. 136.]
140 cord_individual_obj[indivial_i,:] = [14. 9. 92. 101.]
141 cord_individual_obj[indivial_i,:] = [15. 7. 137. 144.]
142 cord_individual_obj[indivial_i,:] = [16. 7. 135. 142.]
143 cord_individual_obj[indivial_i,:] = [17. 8. 84. 92.]
144 cord_individual_obj[indivial_i,:] = [18. 8. 134. 142.]
145 cord_individual_obj[indivial_i,:] = [19. 7. 59. 66.]
146 cord_individual_obj[indivial_i,:] = [20. 7. 152. 159.]
147 cord_individual_obj[indivial_i,:] = [21. 7. 134. 141.]
148 cord_individual_obj[indivial_i,:] = [22. 7. 111. 118.]
149 cord_individual_obj[indivial_i,:] = [23. 8. 138. 146.]
150 cord_individual_obj[indivial_i,:] = [24. 7. 143. 150.]
151
152 min(cord_individual_obj[:,3]) = 60.0
153 historl_G_best_iter[iter,3] = 60.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 8. 52. 60.]
158 cord_individual_obj[indivial_i,:] = [ 1. 8. 77. 85.]
159 cord_individual_obj[indivial_i,:] = [ 2. 7. 106. 113.]
160 cord_individual_obj[indivial_i,:] = [ 3. 7. 164. 171.]
161 cord_individual_obj[indivial_i,:] = [ 4. 7. 137. 144.]
162 cord_individual_obj[indivial_i,:] = [ 5. 8. 116. 124.]
163 cord_individual_obj[indivial_i,:] = [ 6. 9. 124. 133.]

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164 cord_individual_obj[indivial_i,:] = [ 7. 7. 121. 128.]
165 cord_individual_obj[indivial_i,:] = [ 8. 9. 116. 125.]
166 cord_individual_obj[indivial_i,:] = [ 9. 7. 104. 111.]
167 cord_individual_obj[indivial_i,:] = [10. 8. 89. 97.]
168 cord_individual_obj[indivial_i,:] = [11. 6. 126. 132.]
169 cord_individual_obj[indivial_i,:] = [12. 8. 90. 98.]
170 cord_individual_obj[indivial_i,:] = [13. 6. 216. 222.]
171 cord_individual_obj[indivial_i,:] = [14. 6. 112. 118.]
172 cord_individual_obj[indivial_i,:] = [15. 8. 86. 94.]
173 cord_individual_obj[indivial_i,:] = [16. 7. 96. 103.]
174 cord_individual_obj[indivial_i,:] = [17. 8. 121. 129.]
175 cord_individual_obj[indivial_i,:] = [18. 9. 126. 135.]
176 cord_individual_obj[indivial_i,:] = [19. 6. 153. 159.]
177 cord_individual_obj[indivial_i,:] = [20. 6. 106. 112.]
178 cord_individual_obj[indivial_i,:] = [21. 9. 92. 101.]
179 cord_individual_obj[indivial_i,:] = [22. 8. 108. 116.]
180 cord_individual_obj[indivial_i,:] = [23. 8. 95. 103.]
181 cord_individual_obj[indivial_i,:] = [24. 9. 164. 173.]
182
183 min(cord_individual_obj[:,3]) = 60.0
184 historl_G_best_iter[iter,3] = 60.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i,:] = [ 0. 6. 119. 125.]
189 cord_individual_obj[indivial_i,:] = [ 1. 8. 77. 85.]
190 cord_individual_obj[indivial_i,:] = [ 2. 7. 52. 59.]
191 cord_individual_obj[indivial_i,:] = [ 3. 6. 161. 167.]
192 cord_individual_obj[indivial_i,:] = [ 4. 8. 82. 90.]
193 cord_individual_obj[indivial_i,:] = [ 5. 7. 138. 145.]
194 cord_individual_obj[indivial_i,:] = [ 6. 7. 153. 160.]
195 cord_individual_obj[indivial_i,:] = [ 7. 9. 129. 138.]
196 cord_individual_obj[indivial_i,:] = [ 8. 6. 58. 64.]
197 cord_individual_obj[indivial_i,:] = [ 9. 8. 123. 131.]
198 cord_individual_obj[indivial_i,:] = [10. 7. 94. 101.]
199 cord_individual_obj[indivial_i,:] = [11. 6. 108. 114.]
200 cord_individual_obj[indivial_i,:] = [12. 8. 82. 90.]
201 cord_individual_obj[indivial_i,:] = [13. 8. 52. 60.]
202 cord_individual_obj[indivial_i,:] = [14. 6. 192. 198.]
203 cord_individual_obj[indivial_i,:] = [15. 6. 81. 87.]
204 cord_individual_obj[indivial_i,:] = [16. 9. 99. 108.]
205 cord_individual_obj[indivial_i,:] = [17. 7. 110. 117.]
206 cord_individual_obj[indivial_i,:] = [18. 7. 120. 127.]
207 cord_individual_obj[indivial_i,:] = [19. 7. 125. 132.]
208 cord_individual_obj[indivial_i,:] = [20. 7. 119. 126.]
209 cord_individual_obj[indivial_i,:] = [21. 8. 83. 91.]
210 cord_individual_obj[indivial_i,:] = [22. 8. 39. 47.]
211 cord_individual_obj[indivial_i,:] = [23. 9. 151. 160.]
212 cord_individual_obj[indivial_i,:] = [24. 8. 154. 162.]
213
214 min(cord_individual_obj[:,3]) = 47.0
215 historl_G_best_iter[iter,3] = 47.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i,:] = [ 0. 8. 114. 122.]
220 cord_individual_obj[indivial_i,:] = [ 1. 6. 115. 121.]
221 cord_individual_obj[indivial_i,:] = [ 2. 8. 137. 145.]
222 cord_individual_obj[indivial_i,:] = [ 3. 8. 82. 90.]
223 cord_individual_obj[indivial_i,:] = [ 4. 8. 96. 104.]
224 cord_individual_obj[indivial_i,:] = [ 5. 8. 148. 156.]
225 cord_individual_obj[indivial_i,:] = [ 6. 8. 99. 107.]
226 cord_individual_obj[indivial_i,:] = [ 7. 7. 146. 153.]
227 cord_individual_obj[indivial_i,:] = [ 8. 7. 72. 79.]
228 cord_individual_obj[indivial_i,:] = [ 9. 9. 71. 80.]
229 cord_individual_obj[indivial_i,:] = [10. 7. 131. 138.]
230 cord_individual_obj[indivial_i,:] = [11. 7. 119. 126.]
231 cord_individual_obj[indivial_i,:] = [12. 9. 113. 122.]
232 cord_individual_obj[indivial_i,:] = [13. 5. 114. 119.]
233 cord_individual_obj[indivial_i,:] = [14. 8. 39. 47.]
234 cord_individual_obj[indivial_i,:] = [15. 6. 93. 99.]
235 cord_individual_obj[indivial_i,:] = [16. 7. 82. 89.]
236 cord_individual_obj[indivial_i,:] = [17. 8. 92. 100.]
237 cord_individual_obj[indivial_i,:] = [18. 6. 161. 167.]
238 cord_individual_obj[indivial_i,:] = [19. 7. 89. 96.]
239 cord_individual_obj[indivial_i,:] = [20. 7. 77. 84.]
240 cord_individual_obj[indivial_i,:] = [21. 7. 167. 174.]
241 cord_individual_obj[indivial_i,:] = [22. 6. 86. 92.]
242 cord_individual_obj[indivial_i,:] = [23. 9. 122. 131.]
243 cord_individual_obj[indivial_i,:] = [24. 7. 147. 154.]
244
245 min(cord_individual_obj[:,3]) = 47.0
246 historl_G_best_iter[iter,3] = 47.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0. 7. 158. 165.]
251 cord_individual_obj[indivial_i, :] = [ 1. 6. 126. 132.]
252 cord_individual_obj[indivial_i, :] = [ 2. 6. 177. 183.]
253 cord_individual_obj[indivial_i, :] = [ 3. 7. 152. 159.]
254 cord_individual_obj[indivial_i, :] = [ 4. 7. 100. 107.]
255 cord_individual_obj[indivial_i, :] = [ 5. 7. 78. 85.]
256 cord_individual_obj[indivial_i, :] = [ 6. 7. 80. 87.]
257 cord_individual_obj[indivial_i, :] = [ 7. 8. 106. 114.]
258 cord_individual_obj[indivial_i, :] = [ 8. 7. 138. 145.]
259 cord_individual_obj[indivial_i, :] = [ 9. 9. 109. 118.]
260 cord_individual_obj[indivial_i, :] = [ 10. 7. 126. 133.]
261 cord_individual_obj[indivial_i, :] = [ 11. 6. 175. 181.]
262 cord_individual_obj[indivial_i, :] = [ 12. 8. 100. 108.]
263 cord_individual_obj[indivial_i, :] = [ 13. 6. 85. 91.]
264 cord_individual_obj[indivial_i, :] = [ 14. 7. 86. 93.]
265 cord_individual_obj[indivial_i, :] = [ 15. 9. 126. 135.]
266 cord_individual_obj[indivial_i, :] = [ 16. 8. 132. 140.]
267 cord_individual_obj[indivial_i, :] = [ 17. 9. 85. 94.]
268 cord_individual_obj[indivial_i, :] = [ 18. 5. 132. 137.]
269 cord_individual_obj[indivial_i, :] = [ 19. 7. 106. 113.]
270 cord_individual_obj[indivial_i, :] = [ 20. 8. 96. 104.]
271 cord_individual_obj[indivial_i, :] = [ 21. 8. 39. 47.]
272 cord_individual_obj[indivial_i, :] = [ 22. 5. 101. 106.]
273 cord_individual_obj[indivial_i, :] = [ 23. 7. 102. 109.]
274 cord_individual_obj[indivial_i, :] = [ 24. 7. 91. 98.]
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. 7. 127. 134.]
282 cord_individual_obj[indivial_i, :] = [ 1. 6. 117. 123.]
283 cord_individual_obj[indivial_i, :] = [ 2. 8. 39. 47.]
284 cord_individual_obj[indivial_i, :] = [ 3. 7. 128. 135.]
285 cord_individual_obj[indivial_i, :] = [ 4. 10. 87. 97.]
286 cord_individual_obj[indivial_i, :] = [ 5. 8. 71. 79.]
287 cord_individual_obj[indivial_i, :] = [ 6. 6. 71. 77.]
288 cord_individual_obj[indivial_i, :] = [ 7. 8. 87. 95.]
289 cord_individual_obj[indivial_i, :] = [ 8. 7. 92. 99.]
290 cord_individual_obj[indivial_i, :] = [ 9. 7. 63. 70.]
291 cord_individual_obj[indivial_i, :] = [ 10. 7. 113. 120.]
292 cord_individual_obj[indivial_i, :] = [ 11. 6. 118. 124.]
293 cord_individual_obj[indivial_i, :] = [ 12. 9. 79. 88.]
294 cord_individual_obj[indivial_i, :] = [ 13. 6. 136. 142.]
295 cord_individual_obj[indivial_i, :] = [ 14. 7. 86. 93.]
296 cord_individual_obj[indivial_i, :] = [ 15. 10. 143. 153.]
297 cord_individual_obj[indivial_i, :] = [ 16. 9. 163. 172.]
298 cord_individual_obj[indivial_i, :] = [ 17. 9. 70. 79.]
299 cord_individual_obj[indivial_i, :] = [ 18. 6. 139. 145.]
300 cord_individual_obj[indivial_i, :] = [ 19. 7. 96. 103.]
301 cord_individual_obj[indivial_i, :] = [ 20. 10. 130. 140.]
302 cord_individual_obj[indivial_i, :] = [ 21. 7. 140. 147.]
303 cord_individual_obj[indivial_i, :] = [ 22. 5. 94. 99.]
304 cord_individual_obj[indivial_i, :] = [ 23. 7. 72. 79.]
305 cord_individual_obj[indivial_i, :] = [ 24. 7. 109. 116.]
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. 7. 85. 92.]
313 cord_individual_obj[indivial_i, :] = [ 1. 6. 78. 84.]
314 cord_individual_obj[indivial_i, :] = [ 2. 6. 90. 96.]
315 cord_individual_obj[indivial_i, :] = [ 3. 5. 114. 119.]
316 cord_individual_obj[indivial_i, :] = [ 4. 10. 65. 75.]
317 cord_individual_obj[indivial_i, :] = [ 5. 9. 50. 59.]
318 cord_individual_obj[indivial_i, :] = [ 6. 7. 106. 113.]
319 cord_individual_obj[indivial_i, :] = [ 7. 8. 99. 107.]
320 cord_individual_obj[indivial_i, :] = [ 8. 7. 160. 167.]
321 cord_individual_obj[indivial_i, :] = [ 9. 7. 130. 137.]
322 cord_individual_obj[indivial_i, :] = [ 10. 6. 106. 112.]
323 cord_individual_obj[indivial_i, :] = [ 11. 7. 77. 84.]
324 cord_individual_obj[indivial_i, :] = [ 12. 8. 91. 99.]
325 cord_individual_obj[indivial_i, :] = [ 13. 7. 75. 82.]
326 cord_individual_obj[indivial_i, :] = [ 14. 7. 131. 138.]
327 cord_individual_obj[indivial_i, :] = [ 15. 9. 150. 159.]
328 cord_individual_obj[indivial_i, :] = [ 16. 8. 39. 47.]
329 cord_individual_obj[indivial_i, :] = [ 17. 8. 71. 79.]
330 cord_individual_obj[indivial_i, :] = [ 18. 7. 117. 124.]
331 cord_individual_obj[indivial_i, :] = [ 19. 6. 73. 79.]

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332 cord_individual_obj[indivial_i,:] = [20. 8. 74. 82.]
333 cord_individual_obj[indivial_i,:] = [21. 7. 215. 222.]
334 cord_individual_obj[indivial_i,:] = [22. 7. 76. 83.]
335 cord_individual_obj[indivial_i,:] = [23. 8. 110. 118.]
336 cord_individual_obj[indivial_i,:] = [24. 8. 158. 166.]
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. 6. 80. 86.]
344 cord_individual_obj[indivial_i,:] = [ 1. 8. 116. 124.]
345 cord_individual_obj[indivial_i,:] = [ 2. 6. 124. 130.]
346 cord_individual_obj[indivial_i,:] = [ 3. 8. 108. 116.]
347 cord_individual_obj[indivial_i,:] = [ 4. 10. 99. 109.]
348 cord_individual_obj[indivial_i,:] = [ 5. 8. 119. 127.]
349 cord_individual_obj[indivial_i,:] = [ 6. 9. 101. 110.]
350 cord_individual_obj[indivial_i,:] = [ 7. 8. 124. 132.]
351 cord_individual_obj[indivial_i,:] = [ 8. 6. 139. 145.]
352 cord_individual_obj[indivial_i,:] = [ 9. 9. 136. 145.]
353 cord_individual_obj[indivial_i,:] = [10. 7. 129. 136.]
354 cord_individual_obj[indivial_i,:] = [11. 7. 87. 94.]
355 cord_individual_obj[indivial_i,:] = [12. 7. 101. 108.]
356 cord_individual_obj[indivial_i,:] = [13. 9. 69. 78.]
357 cord_individual_obj[indivial_i,:] = [14. 7. 104. 111.]
358 cord_individual_obj[indivial_i,:] = [15. 9. 100. 109.]
359 cord_individual_obj[indivial_i,:] = [16. 7. 94. 101.]
360 cord_individual_obj[indivial_i,:] = [17. 8. 109. 117.]
361 cord_individual_obj[indivial_i,:] = [18. 7. 114. 121.]
362 cord_individual_obj[indivial_i,:] = [19. 8. 79. 87.]
363 cord_individual_obj[indivial_i,:] = [20. 7. 135. 142.]
364 cord_individual_obj[indivial_i,:] = [21. 8. 39. 47.]
365 cord_individual_obj[indivial_i,:] = [22. 6. 109. 115.]
366 cord_individual_obj[indivial_i,:] = [23. 6. 187. 193.]
367 cord_individual_obj[indivial_i,:] = [24. 6. 88. 94.]
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. 7. 152. 159.]
375 cord_individual_obj[indivial_i,:] = [ 1. 8. 65. 73.]
376 cord_individual_obj[indivial_i,:] = [ 2. 7. 85. 92.]
377 cord_individual_obj[indivial_i,:] = [ 3. 7. 115. 122.]
378 cord_individual_obj[indivial_i,:] = [ 4. 6. 84. 90.]
379 cord_individual_obj[indivial_i,:] = [ 5. 6. 120. 126.]
380 cord_individual_obj[indivial_i,:] = [ 6. 7. 98. 105.]
381 cord_individual_obj[indivial_i,:] = [ 7. 9. 120. 129.]
382 cord_individual_obj[indivial_i,:] = [ 8. 9. 112. 121.]
383 cord_individual_obj[indivial_i,:] = [ 9. 7. 116. 123.]
384 cord_individual_obj[indivial_i,:] = [10. 11. 169. 180.]
385 cord_individual_obj[indivial_i,:] = [11. 7. 97. 104.]
386 cord_individual_obj[indivial_i,:] = [12. 8. 90. 98.]
387 cord_individual_obj[indivial_i,:] = [13. 6. 89. 95.]
388 cord_individual_obj[indivial_i,:] = [14. 6. 146. 152.]
389 cord_individual_obj[indivial_i,:] = [15. 8. 151. 159.]
390 cord_individual_obj[indivial_i,:] = [16. 5. 74. 79.]
391 cord_individual_obj[indivial_i,:] = [17. 7. 118. 125.]
392 cord_individual_obj[indivial_i,:] = [18. 7. 136. 143.]
393 cord_individual_obj[indivial_i,:] = [19. 8. 113. 121.]
394 cord_individual_obj[indivial_i,:] = [20. 7. 144. 151.]
395 cord_individual_obj[indivial_i,:] = [21. 7. 128. 135.]
396 cord_individual_obj[indivial_i,:] = [22. 7. 79. 86.]
397 cord_individual_obj[indivial_i,:] = [23. 8. 39. 47.]
398 cord_individual_obj[indivial_i,:] = [24. 6. 107. 113.]
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. 6. 117. 123.]
406 cord_individual_obj[indivial_i,:] = [ 1. 7. 114. 121.]
407 cord_individual_obj[indivial_i,:] = [ 2. 7. 103. 110.]
408 cord_individual_obj[indivial_i,:] = [ 3. 7. 154. 161.]
409 cord_individual_obj[indivial_i,:] = [ 4. 7. 71. 78.]
410 cord_individual_obj[indivial_i,:] = [ 5. 10. 108. 118.]
411 cord_individual_obj[indivial_i,:] = [ 6. 8. 116. 124.]
412 cord_individual_obj[indivial_i,:] = [ 7. 9. 94. 103.]
413 cord_individual_obj[indivial_i,:] = [ 8. 8. 130. 138.]
414 cord_individual_obj[indivial_i,:] = [ 9. 9. 101. 110.]
415 cord_individual_obj[indivial_i,:] = [10. 8. 39. 47.]

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416 cord_individual_obj[indivial_i,:] = [ 11.  5. 154. 159.]
417 cord_individual_obj[indivial_i,:] = [ 12.  6. 114. 120.]
418 cord_individual_obj[indivial_i,:] = [13.  5. 87. 92.]
419 cord_individual_obj[indivial_i,:] = [ 14.  7. 156. 163.]
420 cord_individual_obj[indivial_i,:] = [ 15.  8. 156. 164.]
421 cord_individual_obj[indivial_i,:] = [ 16.  8. 170. 178.]
422 cord_individual_obj[indivial_i,:] = [17.  8. 76. 84.]
423 cord_individual_obj[indivial_i,:] = [ 18.  6. 168. 174.]
424 cord_individual_obj[indivial_i,:] = [ 19.  7. 104. 111.]
425 cord_individual_obj[indivial_i,:] = [ 20.  8. 102. 110.]
426 cord_individual_obj[indivial_i,:] = [ 21.  8. 135. 143.]
427 cord_individual_obj[indivial_i,:] = [22.  7. 63. 70.]
428 cord_individual_obj[indivial_i,:] = [ 23.  9. 111. 120.]
429 cord_individual_obj[indivial_i,:] = [ 24.  8. 117. 125.]
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.  6. 88. 94.]
437 cord_individual_obj[indivial_i,:] = [ 1.  8. 99. 107.]
438 cord_individual_obj[indivial_i,:] = [ 2.  7. 106. 113.]
439 cord_individual_obj[indivial_i,:] = [ 3.  7. 134. 141.]
440 cord_individual_obj[indivial_i,:] = [ 4.  9. 81. 90.]
441 cord_individual_obj[indivial_i,:] = [ 5.  8. 78. 86.]
442 cord_individual_obj[indivial_i,:] = [ 6.  8. 120. 128.]
443 cord_individual_obj[indivial_i,:] = [ 7.  8. 99. 107.]
444 cord_individual_obj[indivial_i,:] = [ 8.  7. 101. 108.]
445 cord_individual_obj[indivial_i,:] = [ 9.  7. 70. 77.]
446 cord_individual_obj[indivial_i,:] = [10.  7. 113. 120.]
447 cord_individual_obj[indivial_i,:] = [11.  7. 89. 96.]
448 cord_individual_obj[indivial_i,:] = [12.  8. 131. 139.]
449 cord_individual_obj[indivial_i,:] = [13.  8. 62. 70.]
450 cord_individual_obj[indivial_i,:] = [14.  6. 75. 81.]
451 cord_individual_obj[indivial_i,:] = [15.  9. 112. 121.]
452 cord_individual_obj[indivial_i,:] = [16.  8. 39. 47.]
453 cord_individual_obj[indivial_i,:] = [17.  8. 98. 106.]
454 cord_individual_obj[indivial_i,:] = [18.  7. 162. 169.]
455 cord_individual_obj[indivial_i,:] = [19.  7. 78. 85.]
456 cord_individual_obj[indivial_i,:] = [20.  7. 83. 90.]
457 cord_individual_obj[indivial_i,:] = [21.  8. 147. 155.]
458 cord_individual_obj[indivial_i,:] = [22.  6. 135. 141.]
459 cord_individual_obj[indivial_i,:] = [23.  7. 94. 101.]
460 cord_individual_obj[indivial_i,:] = [24.  8. 86. 94.]
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.  7. 146. 153.]
468 cord_individual_obj[indivial_i,:] = [ 1.  7. 143. 150.]
469 cord_individual_obj[indivial_i,:] = [ 2.  7. 83. 90.]
470 cord_individual_obj[indivial_i,:] = [ 3.  7. 137. 144.]
471 cord_individual_obj[indivial_i,:] = [ 4.  6. 125. 131.]
472 cord_individual_obj[indivial_i,:] = [ 5.  8. 66. 74.]
473 cord_individual_obj[indivial_i,:] = [ 6.  9. 114. 123.]
474 cord_individual_obj[indivial_i,:] = [ 7.  8. 76. 84.]
475 cord_individual_obj[indivial_i,:] = [ 8.  8. 120. 128.]
476 cord_individual_obj[indivial_i,:] = [ 9.  6. 104. 110.]
477 cord_individual_obj[indivial_i,:] = [10.  6. 176. 182.]
478 cord_individual_obj[indivial_i,:] = [11.  6. 116. 122.]
479 cord_individual_obj[indivial_i,:] = [12.  8. 87. 95.]
480 cord_individual_obj[indivial_i,:] = [13.  7. 84. 91.]
481 cord_individual_obj[indivial_i,:] = [14.  6. 110. 116.]
482 cord_individual_obj[indivial_i,:] = [15.  7. 98. 105.]
483 cord_individual_obj[indivial_i,:] = [16.  7. 156. 163.]
484 cord_individual_obj[indivial_i,:] = [17.  8. 107. 115.]
485 cord_individual_obj[indivial_i,:] = [18.  8. 39. 47.]
486 cord_individual_obj[indivial_i,:] = [19.  7. 144. 151.]
487 cord_individual_obj[indivial_i,:] = [20.  7. 104. 111.]
488 cord_individual_obj[indivial_i,:] = [21.  7. 134. 141.]
489 cord_individual_obj[indivial_i,:] = [22.  7. 79. 86.]
490 cord_individual_obj[indivial_i,:] = [23.  7. 97. 104.]
491 cord_individual_obj[indivial_i,:] = [24.  5. 93. 98.]
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.  7. 67. 74.]
499 cord_individual_obj[indivial_i,:] = [ 1.  6. 139. 145.]

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500 cord_individual_obj[indivial_i,:] = [ 2. 6. 106. 112.]
501 cord_individual_obj[indivial_i,:] = [ 3. 7. 132. 139.]
502 cord_individual_obj[indivial_i,:] = [ 4. 10. 80. 90.]
503 cord_individual_obj[indivial_i,:] = [ 5. 11. 152. 163.]
504 cord_individual_obj[indivial_i,:] = [ 6. 6. 104. 110.]
505 cord_individual_obj[indivial_i,:] = [ 7. 11. 129. 140.]
506 cord_individual_obj[indivial_i,:] = [ 8. 7. 109. 116.]
507 cord_individual_obj[indivial_i,:] = [ 9. 8. 99. 107.]
508 cord_individual_obj[indivial_i,:] = [10. 8. 39. 47.]
509 cord_individual_obj[indivial_i,:] = [11. 9. 113. 122.]
510 cord_individual_obj[indivial_i,:] = [12. 8. 141. 149.]
511 cord_individual_obj[indivial_i,:] = [13. 6. 95. 101.]
512 cord_individual_obj[indivial_i,:] = [14. 7. 120. 127.]
513 cord_individual_obj[indivial_i,:] = [15. 10. 146. 156.]
514 cord_individual_obj[indivial_i,:] = [16. 7. 82. 89.]
515 cord_individual_obj[indivial_i,:] = [17. 9. 77. 86.]
516 cord_individual_obj[indivial_i,:] = [18. 6. 166. 172.]
517 cord_individual_obj[indivial_i,:] = [19. 8. 111. 119.]
518 cord_individual_obj[indivial_i,:] = [20. 8. 43. 51.]
519 cord_individual_obj[indivial_i,:] = [21. 8. 126. 134.]
520 cord_individual_obj[indivial_i,:] = [22. 6. 119. 125.]
521 cord_individual_obj[indivial_i,:] = [23. 8. 78. 86.]
522 cord_individual_obj[indivial_i,:] = [24. 6. 139. 145.]
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. 6. 177. 183.]
530 cord_individual_obj[indivial_i,:] = [ 1. 7. 80. 87.]
531 cord_individual_obj[indivial_i,:] = [ 2. 8. 151. 159.]
532 cord_individual_obj[indivial_i,:] = [ 3. 7. 75. 82.]
533 cord_individual_obj[indivial_i,:] = [ 4. 7. 108. 115.]
534 cord_individual_obj[indivial_i,:] = [ 5. 9. 111. 120.]
535 cord_individual_obj[indivial_i,:] = [ 6. 8. 104. 112.]
536 cord_individual_obj[indivial_i,:] = [ 7. 8. 64. 72.]
537 cord_individual_obj[indivial_i,:] = [ 8. 6. 125. 131.]
538 cord_individual_obj[indivial_i,:] = [ 9. 6. 179. 185.]
539 cord_individual_obj[indivial_i,:] = [10. 7. 133. 140.]
540 cord_individual_obj[indivial_i,:] = [11. 8. 105. 113.]
541 cord_individual_obj[indivial_i,:] = [12. 9. 102. 111.]
542 cord_individual_obj[indivial_i,:] = [13. 7. 121. 128.]
543 cord_individual_obj[indivial_i,:] = [14. 6. 238. 244.]
544 cord_individual_obj[indivial_i,:] = [15. 10. 93. 103.]
545 cord_individual_obj[indivial_i,:] = [16. 8. 162. 170.]
546 cord_individual_obj[indivial_i,:] = [17. 9. 117. 126.]
547 cord_individual_obj[indivial_i,:] = [18. 8. 39. 47.]
548 cord_individual_obj[indivial_i,:] = [19. 7. 103. 110.]
549 cord_individual_obj[indivial_i,:] = [20. 7. 104. 111.]
550 cord_individual_obj[indivial_i,:] = [21. 8. 95. 103.]
551 cord_individual_obj[indivial_i,:] = [22. 6. 93. 99.]
552 cord_individual_obj[indivial_i,:] = [23. 7. 107. 114.]
553 cord_individual_obj[indivial_i,:] = [24. 7. 90. 97.]
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. 6. 87. 93.]
561 cord_individual_obj[indivial_i,:] = [ 1. 6. 108. 114.]
562 cord_individual_obj[indivial_i,:] = [ 2. 5. 131. 136.]
563 cord_individual_obj[indivial_i,:] = [ 3. 6. 93. 99.]
564 cord_individual_obj[indivial_i,:] = [ 4. 8. 57. 65.]
565 cord_individual_obj[indivial_i,:] = [ 5. 9. 55. 64.]
566 cord_individual_obj[indivial_i,:] = [ 6. 8. 137. 145.]
567 cord_individual_obj[indivial_i,:] = [ 7. 8. 114. 122.]
568 cord_individual_obj[indivial_i,:] = [ 8. 5. 115. 120.]
569 cord_individual_obj[indivial_i,:] = [ 9. 8. 64. 72.]
570 cord_individual_obj[indivial_i,:] = [10. 6. 131. 137.]
571 cord_individual_obj[indivial_i,:] = [11. 6. 146. 152.]
572 cord_individual_obj[indivial_i,:] = [12. 7. 136. 143.]
573 cord_individual_obj[indivial_i,:] = [13. 8. 106. 114.]
574 cord_individual_obj[indivial_i,:] = [14. 8. 39. 47.]
575 cord_individual_obj[indivial_i,:] = [15. 8. 93. 101.]
576 cord_individual_obj[indivial_i,:] = [16. 8. 148. 156.]
577 cord_individual_obj[indivial_i,:] = [17. 9. 106. 115.]
578 cord_individual_obj[indivial_i,:] = [18. 8. 136. 144.]
579 cord_individual_obj[indivial_i,:] = [19. 7. 112. 119.]
580 cord_individual_obj[indivial_i,:] = [20. 7. 178. 185.]
581 cord_individual_obj[indivial_i,:] = [21. 8. 159. 167.]
582 cord_individual_obj[indivial_i,:] = [22. 8. 70. 78.]
583 cord_individual_obj[indivial_i,:] = [23. 9. 176. 185.]

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584     cord_individual_obj[indivial_i, :] = [ 24.  7. 110. 117.]
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.  7. 72. 79.]
592     cord_individual_obj[indivial_i, :] = [ 1.  9. 103. 112.]
593     cord_individual_obj[indivial_i, :] = [ 2.  6. 93. 99.]
594     cord_individual_obj[indivial_i, :] = [ 3.  9. 83. 92.]
595     cord_individual_obj[indivial_i, :] = [ 4.  9. 89. 98.]
596     cord_individual_obj[indivial_i, :] = [ 5.  7. 182. 189.]
597     cord_individual_obj[indivial_i, :] = [ 6.  7. 88. 95.]
598     cord_individual_obj[indivial_i, :] = [ 7.  8. 112. 120.]
599     cord_individual_obj[indivial_i, :] = [ 8.  7. 110. 117.]
600     cord_individual_obj[indivial_i, :] = [ 9.  7. 55. 62.]
601     cord_individual_obj[indivial_i, :] = [ 10. 7. 115. 122.]
602     cord_individual_obj[indivial_i, :] = [ 11. 8. 79. 87.]
603     cord_individual_obj[indivial_i, :] = [ 12. 7. 139. 146.]
604     cord_individual_obj[indivial_i, :] = [ 13. 8. 115. 123.]
605     cord_individual_obj[indivial_i, :] = [ 14. 7. 86. 93.]
606     cord_individual_obj[indivial_i, :] = [ 15. 9. 138. 147.]
607     cord_individual_obj[indivial_i, :] = [ 16. 8. 96. 104.]
608     cord_individual_obj[indivial_i, :] = [ 17. 8. 128. 136.]
609     cord_individual_obj[indivial_i, :] = [ 18. 6. 164. 170.]
610     cord_individual_obj[indivial_i, :] = [ 19. 9. 105. 114.]
611     cord_individual_obj[indivial_i, :] = [ 20. 8. 39. 47.]
612     cord_individual_obj[indivial_i, :] = [ 21. 8. 145. 153.]
613     cord_individual_obj[indivial_i, :] = [ 22. 5. 99. 104.]
614     cord_individual_obj[indivial_i, :] = [ 23. 7. 55. 62.]
615     cord_individual_obj[indivial_i, :] = [ 24. 9. 196. 205.]
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.  7. 72. 79.]
623     cord_individual_obj[indivial_i, :] = [ 1.  8. 103. 111.]
624     cord_individual_obj[indivial_i, :] = [ 2.  8. 165. 173.]
625     cord_individual_obj[indivial_i, :] = [ 3.  8. 119. 127.]
626     cord_individual_obj[indivial_i, :] = [ 4. 10. 88. 98.]
627     cord_individual_obj[indivial_i, :] = [ 5. 10. 79. 89.]
628     cord_individual_obj[indivial_i, :] = [ 6.  9. 97. 106.]
629     cord_individual_obj[indivial_i, :] = [ 7.  8. 105. 113.]
630     cord_individual_obj[indivial_i, :] = [ 8. 6. 63. 69.]
631     cord_individual_obj[indivial_i, :] = [ 9.  8. 104. 112.]
632     cord_individual_obj[indivial_i, :] = [ 10. 6. 102. 108.]
633     cord_individual_obj[indivial_i, :] = [ 11. 7. 49. 56.]
634     cord_individual_obj[indivial_i, :] = [ 12. 7. 160. 167.]
635     cord_individual_obj[indivial_i, :] = [ 13. 6. 170. 176.]
636     cord_individual_obj[indivial_i, :] = [ 14. 7. 110. 117.]
637     cord_individual_obj[indivial_i, :] = [ 15. 10. 90. 100.]
638     cord_individual_obj[indivial_i, :] = [ 16. 7. 113. 120.]
639     cord_individual_obj[indivial_i, :] = [ 17. 8. 101. 109.]
640     cord_individual_obj[indivial_i, :] = [ 18. 7. 158. 165.]
641     cord_individual_obj[indivial_i, :] = [ 19. 8. 114. 122.]
642     cord_individual_obj[indivial_i, :] = [ 20. 8. 87. 95.]
643     cord_individual_obj[indivial_i, :] = [ 21. 7. 126. 133.]
644     cord_individual_obj[indivial_i, :] = [ 22. 7. 93. 100.]
645     cord_individual_obj[indivial_i, :] = [ 23. 7. 88. 95.]
646     cord_individual_obj[indivial_i, :] = [ 24. 8. 39. 47.]
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.  7. 108. 115.]
654     cord_individual_obj[indivial_i, :] = [ 1.  6. 102. 108.]
655     cord_individual_obj[indivial_i, :] = [ 2.  8. 118. 126.]
656     cord_individual_obj[indivial_i, :] = [ 3.  6. 146. 152.]
657     cord_individual_obj[indivial_i, :] = [ 4. 8. 105. 113.]
658     cord_individual_obj[indivial_i, :] = [ 5. 10. 145. 155.]
659     cord_individual_obj[indivial_i, :] = [ 6. 10. 72. 82.]
660     cord_individual_obj[indivial_i, :] = [ 7. 8. 79. 87.]
661     cord_individual_obj[indivial_i, :] = [ 8. 7. 125. 132.]
662     cord_individual_obj[indivial_i, :] = [ 9. 8. 119. 127.]
663     cord_individual_obj[indivial_i, :] = [ 10. 7. 110. 117.]
664     cord_individual_obj[indivial_i, :] = [ 11. 5. 155. 160.]
665     cord_individual_obj[indivial_i, :] = [ 12. 7. 108. 115.]
666     cord_individual_obj[indivial_i, :] = [ 13. 8. 39. 47.]
667     cord_individual_obj[indivial_i, :] = [ 14. 7. 72. 79.]

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668 cord_individual_obj[indivial_i,:] = [ 15. 9. 128. 137.]
669 cord_individual_obj[indivial_i,:] = [ 16. 7. 143. 150.]
670 cord_individual_obj[indivial_i,:] = [17. 8. 88. 96.]
671 cord_individual_obj[indivial_i,:] = [ 18. 6. 132. 138.]
672 cord_individual_obj[indivial_i,:] = [ 19. 6. 109. 115.]
673 cord_individual_obj[indivial_i,:] = [20. 8. 90. 98.]
674 cord_individual_obj[indivial_i,:] = [ 21. 8. 154. 162.]
675 cord_individual_obj[indivial_i,:] = [ 22. 5. 100. 105.]
676 cord_individual_obj[indivial_i,:] = [23. 7. 71. 78.]
677 cord_individual_obj[indivial_i,:] = [ 24. 7. 135. 142.]
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 = 154.0
689 Proportion_of_area = 0.1425925925925926
690 BEST_CHROM =
691     berth: [18.5 24.5 24. 4. 12.5 2.5 2. 3. 6. 10. 10. 18.5 23. 14. ]
692     time: [4. 2. 4. 0. 0. 6. 2. 4. 2. 2. 1. 0. 0. 1.]
693     num_QC: [4. 3. 3. 4. 5. 3. 2. 5. 4. 2. 3. 3. 3. 3.]
694 Objective function values and some other indicators:
695 Obj0 = 8.00          Obj1 = 39.00          Obj0 + Obj1 = 47.00
696 Total movement of crane: 6.00
697 Total waiting time in berth position: 28.00
698 Total index of q during berthing: 830.00
699 Specific arrangement for each vessel:
700
    V_id: 0           li: 5.0           xi: 18.5           bow of i: 16.0           tail of i: 21.0           gama_i0: 4.0           gama_i1: 5
    .0             gama_i1 + 1: 6.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 160.0           work
701 load_i: 160.0
    V_id: 1           li: 9.0           xi: 24.5           bow of i: 20.0           tail of i: 29.0           gama_i0: 2.0           gama_i1: 3
    .0             gama_i1 + 1: 4.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 80.0           work
702 load_i: 80.0
    V_id: 2           li: 6.0           xi: 24.0           bow of i: 21.0           tail of i: 27.0           gama_i0: 4.0           gama_i1: 6
    .0             gama_i1 + 1: 7.0       gama_i1 - gama_i0: 2.0           duration_time_i: 3.0           demand_i: 160.0           work
703 load_i: 160.0
    V_id: 3           li: 8.0           xi: 4.0           bow of i: 0.0           tail of i: 8.0           gama_i0: 0.0           gama_i1: 1.0
    .0             gama_i1 + 1: 2.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 120.0           work load_i:
704 120.0
    V_id: 4           li: 9.0           xi: 12.5           bow of i: 8.0           tail of i: 17.0           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: 100.0           work
705 load_i: 100.0
    V_id: 5           li: 5.0           xi: 2.5           bow of i: 0.0           tail of i: 5.0           gama_i0: 6.0           gama_i1: 8.0
    .0             gama_i1 + 1: 9.0       gama_i1 - gama_i0: 2.0           duration_time_i: 3.0           demand_i: 140.0           work load_i:
706 140.0
    V_id: 6           li: 4.0           xi: 2.0           bow of i: 0.0           tail of i: 4.0           gama_i0: 2.0           gama_i1: 3.0
    .0             gama_i1 + 1: 4.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 60.0           work load_i:
707 60.0
    V_id: 7           li: 6.0           xi: 3.0           bow of i: 0.0           tail of i: 6.0           gama_i0: 4.0           gama_i1: 5.0
    .0             gama_i1 + 1: 6.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 160.0           work load_i:
708 160.0
    V_id: 8           li: 4.0           xi: 6.0           bow of i: 4.0           tail of i: 8.0           gama_i0: 2.0           gama_i1: 3.0
    .0             gama_i1 + 1: 4.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 100.0           work load_i:
709 100.0
    V_id: 9           li: 4.0           xi: 10.0           bow of i: 8.0           tail of i: 12.0           gama_i0: 2.0           gama_i1: 3
    .0             gama_i1 + 1: 4.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 60.0           work
710 load_i: 60.0
    V_id: 10          li: 4.0           xi: 10.0           bow of i: 8.0           tail of i: 12.0           gama_i0: 1.0           gama_i1: 1
    : 1.0             gama_i1 + 1: 2.0       gama_i1 - gama_i0: 0.0           duration_time_i: 1.0           demand_i: 60.0           work
711 load_i: 60.0
    V_id: 11          li: 3.0           xi: 18.5           bow of i: 17.0           tail of i: 20.0           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: 100.0           work
712 load_i: 100.0
    V_id: 12          li: 6.0           xi: 23.0           bow of i: 20.0           tail of i: 26.0           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: 100.0           work
713 load_i: 100.0
    V_id: 13          li: 4.0           xi: 14.0           bow of i: 12.0           tail of i: 16.0           gama_i0: 1.0           gama_i1: 1
    : 3.0             gama_i1 + 1: 4.0       gama_i1 - gama_i0: 2.0           duration_time_i: 3.0           demand_i: 140.0           work
714 load_i: 140.0
    V_id: 14          li: 4.0           xi: 10.0           bow of i: 8.0           tail of i: 12.0           gama_i0: 1.0           gama_i1: 1
    : 3.0             gama_i1 + 1: 4.0       gama_i1 - gama_i0: 2.0           duration_time_i: 2.0           demand_i: 140.0           work
715 Algorithm finished and the total CPU time: 373 s
716 End
717

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