

unknown

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80 cord_individual_obj[indivial_i,:] = [ 16. 7. 171. 178.]
81 cord_individual_obj[indivial_i,:] = [ 17. 7. 137. 144.]
82 cord_individual_obj[indivial_i,:] = [ 18. 9. 130. 139.]
83 cord_individual_obj[indivial_i,:] = [ 19. 9. 139. 148.]
84 cord_individual_obj[indivial_i,:] = [ 20. 7. 122. 129.]
85 cord_individual_obj[indivial_i,:] = [ 21. 8. 126. 134.]
86 cord_individual_obj[indivial_i,:] = [ 22. 7. 160. 167.]
87 cord_individual_obj[indivial_i,:] = [ 23. 9. 69. 78.]
88 cord_individual_obj[indivial_i,:] = [ 24. 7. 88. 95.]
89
90 min(cord_individual_obj[:,3]) = 78.0
91 historl_G_best_iter[iter, 3] = 78.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 10. 139. 149.]
96 cord_individual_obj[indivial_i,:] = [ 1. 9. 97. 106.]
97 cord_individual_obj[indivial_i,:] = [ 2. 9. 165. 174.]
98 cord_individual_obj[indivial_i,:] = [ 3. 9. 138. 147.]
99 cord_individual_obj[indivial_i,:] = [ 4. 8. 119. 127.]
100 cord_individual_obj[indivial_i,:] = [ 5. 10. 143. 153.]
101 cord_individual_obj[indivial_i,:] = [ 6. 7. 137. 144.]
102 cord_individual_obj[indivial_i,:] = [ 7. 8. 132. 140.]
103 cord_individual_obj[indivial_i,:] = [ 8. 8. 139. 147.]
104 cord_individual_obj[indivial_i,:] = [ 9. 6. 144. 150.]
105 cord_individual_obj[indivial_i,:] = [ 10. 9. 133. 142.]
106 cord_individual_obj[indivial_i,:] = [ 11. 8. 125. 133.]
107 cord_individual_obj[indivial_i,:] = [ 12. 9. 136. 145.]
108 cord_individual_obj[indivial_i,:] = [ 13. 8. 151. 159.]
109 cord_individual_obj[indivial_i,:] = [ 14. 7. 133. 140.]
110 cord_individual_obj[indivial_i,:] = [ 15. 8. 85. 93.]
111 cord_individual_obj[indivial_i,:] = [ 16. 9. 69. 78.]
112 cord_individual_obj[indivial_i,:] = [ 17. 8. 115. 123.]
113 cord_individual_obj[indivial_i,:] = [ 18. 6. 119. 125.]
114 cord_individual_obj[indivial_i,:] = [ 19. 10. 151. 161.]
115 cord_individual_obj[indivial_i,:] = [ 20. 8. 128. 136.]
116 cord_individual_obj[indivial_i,:] = [ 21. 8. 136. 144.]
117 cord_individual_obj[indivial_i,:] = [ 22. 8. 89. 97.]
118 cord_individual_obj[indivial_i,:] = [ 23. 8. 157. 165.]
119 cord_individual_obj[indivial_i,:] = [ 24. 9. 161. 170.]
120
121 min(cord_individual_obj[:,3]) = 78.0
122 historl_G_best_iter[iter, 3] = 78.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 8. 122. 130.]
127 cord_individual_obj[indivial_i,:] = [ 1. 8. 123. 131.]
128 cord_individual_obj[indivial_i,:] = [ 2. 9. 69. 78.]
129 cord_individual_obj[indivial_i,:] = [ 3. 9. 178. 187.]
130 cord_individual_obj[indivial_i,:] = [ 4. 7. 115. 122.]
131 cord_individual_obj[indivial_i,:] = [ 5. 8. 147. 155.]
132 cord_individual_obj[indivial_i,:] = [ 6. 8. 128. 136.]
133 cord_individual_obj[indivial_i,:] = [ 7. 7. 124. 131.]
134 cord_individual_obj[indivial_i,:] = [ 8. 9. 93. 102.]
135 cord_individual_obj[indivial_i,:] = [ 9. 8. 158. 166.]
136 cord_individual_obj[indivial_i,:] = [ 10. 8. 163. 171.]
137 cord_individual_obj[indivial_i,:] = [ 11. 7. 128. 135.]
138 cord_individual_obj[indivial_i,:] = [ 12. 8. 102. 110.]
139 cord_individual_obj[indivial_i,:] = [ 13. 8. 111. 119.]
140 cord_individual_obj[indivial_i,:] = [ 14. 9. 95. 104.]
141 cord_individual_obj[indivial_i,:] = [ 15. 7. 112. 119.]
142 cord_individual_obj[indivial_i,:] = [ 16. 7. 127. 134.]
143 cord_individual_obj[indivial_i,:] = [ 17. 8. 118. 126.]
144 cord_individual_obj[indivial_i,:] = [ 18. 9. 146. 155.]
145 cord_individual_obj[indivial_i,:] = [ 19. 9. 139. 148.]
146 cord_individual_obj[indivial_i,:] = [ 20. 7. 135. 142.]
147 cord_individual_obj[indivial_i,:] = [ 21. 9. 141. 150.]
148 cord_individual_obj[indivial_i,:] = [ 22. 8. 120. 128.]
149 cord_individual_obj[indivial_i,:] = [ 23. 8. 105. 113.]
150 cord_individual_obj[indivial_i,:] = [ 24. 8. 185. 193.]
151
152 min(cord_individual_obj[:,3]) = 78.0
153 historl_G_best_iter[iter, 3] = 78.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 10. 130. 140.]
158 cord_individual_obj[indivial_i,:] = [ 1. 6. 93. 99.]
159 cord_individual_obj[indivial_i,:] = [ 2. 7. 118. 125.]
160 cord_individual_obj[indivial_i,:] = [ 3. 7. 112. 119.]
161 cord_individual_obj[indivial_i,:] = [ 4. 8. 106. 114.]
162 cord_individual_obj[indivial_i,:] = [ 5. 9. 123. 132.]
163 cord_individual_obj[indivial_i,:] = [ 6. 7. 92. 99.]

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164 cord_individual_obj[indivial_i,:] = [ 7. 10. 171. 181.]
165 cord_individual_obj[indivial_i,:] = [ 8. 10. 105. 115.]
166 cord_individual_obj[indivial_i,:] = [ 9. 8. 161. 169.]
167 cord_individual_obj[indivial_i,:] = [10. 7. 76. 83.]
168 cord_individual_obj[indivial_i,:] = [11. 8. 116. 124.]
169 cord_individual_obj[indivial_i,:] = [12. 10. 197. 207.]
170 cord_individual_obj[indivial_i,:] = [13. 8. 114. 122.]
171 cord_individual_obj[indivial_i,:] = [14. 7. 82. 89.]
172 cord_individual_obj[indivial_i,:] = [15. 8. 111. 119.]
173 cord_individual_obj[indivial_i,:] = [16. 7. 105. 112.]
174 cord_individual_obj[indivial_i,:] = [17. 9. 142. 151.]
175 cord_individual_obj[indivial_i,:] = [18. 6. 140. 146.]
176 cord_individual_obj[indivial_i,:] = [19. 9. 132. 141.]
177 cord_individual_obj[indivial_i,:] = [20. 9. 139. 148.]
178 cord_individual_obj[indivial_i,:] = [21. 8. 115. 123.]
179 cord_individual_obj[indivial_i,:] = [22. 8. 123. 131.]
180 cord_individual_obj[indivial_i,:] = [23. 9. 267. 276.]
181 cord_individual_obj[indivial_i,:] = [24. 9. 69. 78.]
182
183 min(cord_individual_obj[:,3]) = 78.0
184 historl_G_best_iter[iter,3] = 78.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i,:] = [ 0. 8. 98. 106.]
189 cord_individual_obj[indivial_i,:] = [ 1. 9. 106. 115.]
190 cord_individual_obj[indivial_i,:] = [ 2. 7. 145. 152.]
191 cord_individual_obj[indivial_i,:] = [ 3. 6. 131. 137.]
192 cord_individual_obj[indivial_i,:] = [ 4. 6. 107. 113.]
193 cord_individual_obj[indivial_i,:] = [ 5. 8. 126. 134.]
194 cord_individual_obj[indivial_i,:] = [ 6. 9. 80. 89.]
195 cord_individual_obj[indivial_i,:] = [ 7. 7. 113. 120.]
196 cord_individual_obj[indivial_i,:] = [ 8. 6. 68. 74.]
197 cord_individual_obj[indivial_i,:] = [ 9. 7. 151. 158.]
198 cord_individual_obj[indivial_i,:] = [10. 7. 120. 127.]
199 cord_individual_obj[indivial_i,:] = [11. 7. 164. 171.]
200 cord_individual_obj[indivial_i,:] = [12. 9. 151. 160.]
201 cord_individual_obj[indivial_i,:] = [13. 8. 117. 125.]
202 cord_individual_obj[indivial_i,:] = [14. 9. 211. 220.]
203 cord_individual_obj[indivial_i,:] = [15. 7. 101. 108.]
204 cord_individual_obj[indivial_i,:] = [16. 8. 155. 163.]
205 cord_individual_obj[indivial_i,:] = [17. 7. 100. 107.]
206 cord_individual_obj[indivial_i,:] = [18. 7. 130. 137.]
207 cord_individual_obj[indivial_i,:] = [19. 8. 172. 180.]
208 cord_individual_obj[indivial_i,:] = [20. 7. 171. 178.]
209 cord_individual_obj[indivial_i,:] = [21. 7. 108. 115.]
210 cord_individual_obj[indivial_i,:] = [22. 8. 129. 137.]
211 cord_individual_obj[indivial_i,:] = [23. 9. 69. 78.]
212 cord_individual_obj[indivial_i,:] = [24. 7. 125. 132.]
213
214 min(cord_individual_obj[:,3]) = 74.0
215 historl_G_best_iter[iter,3] = 74.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i,:] = [ 0. 8. 118. 126.]
220 cord_individual_obj[indivial_i,:] = [ 1. 7. 143. 150.]
221 cord_individual_obj[indivial_i,:] = [ 2. 9. 134. 143.]
222 cord_individual_obj[indivial_i,:] = [ 3. 7. 182. 189.]
223 cord_individual_obj[indivial_i,:] = [ 4. 8. 102. 110.]
224 cord_individual_obj[indivial_i,:] = [ 5. 7. 110. 117.]
225 cord_individual_obj[indivial_i,:] = [ 6. 7. 116. 123.]
226 cord_individual_obj[indivial_i,:] = [ 7. 7. 140. 147.]
227 cord_individual_obj[indivial_i,:] = [ 8. 9. 103. 112.]
228 cord_individual_obj[indivial_i,:] = [ 9. 8. 85. 93.]
229 cord_individual_obj[indivial_i,:] = [10. 7. 114. 121.]
230 cord_individual_obj[indivial_i,:] = [11. 6. 123. 129.]
231 cord_individual_obj[indivial_i,:] = [12. 8. 107. 115.]
232 cord_individual_obj[indivial_i,:] = [13. 8. 123. 131.]
233 cord_individual_obj[indivial_i,:] = [14. 6. 68. 74.]
234 cord_individual_obj[indivial_i,:] = [15. 9. 147. 156.]
235 cord_individual_obj[indivial_i,:] = [16. 10. 167. 177.]
236 cord_individual_obj[indivial_i,:] = [17. 7. 151. 158.]
237 cord_individual_obj[indivial_i,:] = [18. 8. 127. 135.]
238 cord_individual_obj[indivial_i,:] = [19. 10. 104. 114.]
239 cord_individual_obj[indivial_i,:] = [20. 8. 91. 99.]
240 cord_individual_obj[indivial_i,:] = [21. 8. 123. 131.]
241 cord_individual_obj[indivial_i,:] = [22. 8. 88. 96.]
242 cord_individual_obj[indivial_i,:] = [23. 9. 156. 165.]
243 cord_individual_obj[indivial_i,:] = [24. 9. 122. 131.]
244
245 min(cord_individual_obj[:,3]) = 74.0
246 historl_G_best_iter[iter,3] = 74.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0.  8.  96. 104.]
251 cord_individual_obj[indivial_i, :] = [ 1.  8. 132. 140.]
252 cord_individual_obj[indivial_i, :] = [ 2.  7. 167. 174.]
253 cord_individual_obj[indivial_i, :] = [ 3.  6. 68. 74.]
254 cord_individual_obj[indivial_i, :] = [ 4.  6. 115. 121.]
255 cord_individual_obj[indivial_i, :] = [ 5.  9. 126. 135.]
256 cord_individual_obj[indivial_i, :] = [ 6.  7. 122. 129.]
257 cord_individual_obj[indivial_i, :] = [ 7.  6. 123. 129.]
258 cord_individual_obj[indivial_i, :] = [ 8.  8. 126. 134.]
259 cord_individual_obj[indivial_i, :] = [ 9.  8. 127. 135.]
260 cord_individual_obj[indivial_i, :] = [10.  8. 119. 127.]
261 cord_individual_obj[indivial_i, :] = [11.  6. 120. 126.]
262 cord_individual_obj[indivial_i, :] = [12.  6. 105. 111.]
263 cord_individual_obj[indivial_i, :] = [13.  9. 119. 128.]
264 cord_individual_obj[indivial_i, :] = [14.  8. 132. 140.]
265 cord_individual_obj[indivial_i, :] = [15.  7. 185. 192.]
266 cord_individual_obj[indivial_i, :] = [16.  9. 139. 148.]
267 cord_individual_obj[indivial_i, :] = [17.  8. 95. 103.]
268 cord_individual_obj[indivial_i, :] = [18.  8. 174. 182.]
269 cord_individual_obj[indivial_i, :] = [19.  7. 118. 125.]
270 cord_individual_obj[indivial_i, :] = [20.  7. 135. 142.]
271 cord_individual_obj[indivial_i, :] = [21.  7. 143. 150.]
272 cord_individual_obj[indivial_i, :] = [22. 10. 161. 171.]
273 cord_individual_obj[indivial_i, :] = [23. 10. 148. 158.]
274 cord_individual_obj[indivial_i, :] = [24.  6. 134. 140.]
275

276 min(cord_individual_obj[:, 3]) = 74.0
277 historl_G_best_iter[iter, 3] = 74.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0.  7. 111. 118.]
282 cord_individual_obj[indivial_i, :] = [ 1.  7. 135. 142.]
283 cord_individual_obj[indivial_i, :] = [ 2.  8. 125. 133.]
284 cord_individual_obj[indivial_i, :] = [ 3.  8. 184. 192.]
285 cord_individual_obj[indivial_i, :] = [ 4.  7. 125. 132.]
286 cord_individual_obj[indivial_i, :] = [ 5.  7. 99. 106.]
287 cord_individual_obj[indivial_i, :] = [ 6.  8. 166. 174.]
288 cord_individual_obj[indivial_i, :] = [ 7.  7. 137. 144.]
289 cord_individual_obj[indivial_i, :] = [ 8.  8. 114. 122.]
290 cord_individual_obj[indivial_i, :] = [ 9.  7. 120. 127.]
291 cord_individual_obj[indivial_i, :] = [10.  7. 118. 125.]
292 cord_individual_obj[indivial_i, :] = [11.  8. 99. 107.]
293 cord_individual_obj[indivial_i, :] = [12.  7. 111. 118.]
294 cord_individual_obj[indivial_i, :] = [13.  9. 103. 112.]
295 cord_individual_obj[indivial_i, :] = [14.  9. 109. 118.]
296 cord_individual_obj[indivial_i, :] = [15.  6. 68. 74.]
297 cord_individual_obj[indivial_i, :] = [16.  8. 191. 199.]
298 cord_individual_obj[indivial_i, :] = [17.  8. 153. 161.]
299 cord_individual_obj[indivial_i, :] = [18.  7. 158. 165.]
300 cord_individual_obj[indivial_i, :] = [19.  8. 105. 113.]
301 cord_individual_obj[indivial_i, :] = [20.  8. 117. 125.]
302 cord_individual_obj[indivial_i, :] = [21. 10. 148. 158.]
303 cord_individual_obj[indivial_i, :] = [22.  9. 139. 148.]
304 cord_individual_obj[indivial_i, :] = [23.  8. 102. 110.]
305 cord_individual_obj[indivial_i, :] = [24.  8. 139. 147.]
306

307 min(cord_individual_obj[:, 3]) = 74.0
308 historl_G_best_iter[iter, 3] = 74.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0.  9. 123. 132.]
313 cord_individual_obj[indivial_i, :] = [ 1.  6. 161. 167.]
314 cord_individual_obj[indivial_i, :] = [ 2.  8. 133. 141.]
315 cord_individual_obj[indivial_i, :] = [ 3. 10. 104. 114.]
316 cord_individual_obj[indivial_i, :] = [ 4.  8. 105. 113.]
317 cord_individual_obj[indivial_i, :] = [ 5.  8. 113. 121.]
318 cord_individual_obj[indivial_i, :] = [ 6.  8. 109. 117.]
319 cord_individual_obj[indivial_i, :] = [ 7.  7. 107. 114.]
320 cord_individual_obj[indivial_i, :] = [ 8. 10. 107. 117.]
321 cord_individual_obj[indivial_i, :] = [ 9.  8. 85. 93.]
322 cord_individual_obj[indivial_i, :] = [10.  8. 77. 85.]
323 cord_individual_obj[indivial_i, :] = [11. 10. 88. 98.]
324 cord_individual_obj[indivial_i, :] = [12.  7. 116. 123.]
325 cord_individual_obj[indivial_i, :] = [13.  9. 88. 97.]
326 cord_individual_obj[indivial_i, :] = [14. 10. 118. 128.]
327 cord_individual_obj[indivial_i, :] = [15.  7. 166. 173.]
328 cord_individual_obj[indivial_i, :] = [16.  6. 68. 74.]
329 cord_individual_obj[indivial_i, :] = [17.  7. 118. 125.]
330 cord_individual_obj[indivial_i, :] = [18.  9. 111. 120.]
331 cord_individual_obj[indivial_i, :] = [19.  8. 87. 95.]

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332 cord_individual_obj[indivial_i, :] = [ 20. 7. 103. 110.]
333 cord_individual_obj[indivial_i, :] = [ 21. 11. 185. 196.]
334 cord_individual_obj[indivial_i, :] = [ 22. 9. 64. 73.]
335 cord_individual_obj[indivial_i, :] = [ 23. 7. 123. 130.]
336 cord_individual_obj[indivial_i, :] = [ 24. 10. 115. 125.]
337
338 min(cord_individual_obj[:, 3]) = 73.0
339 histol_G_best_iter[iter, 3] = 73.0
340 Begin iteration:
341
342 iter = 10
343 cord_individual_obj[indivial_i, :] = [ 0. 9. 117. 126.]
344 cord_individual_obj[indivial_i, :] = [ 1. 7. 123. 130.]
345 cord_individual_obj[indivial_i, :] = [ 2. 8. 89. 97.]
346 cord_individual_obj[indivial_i, :] = [ 3. 8. 129. 137.]
347 cord_individual_obj[indivial_i, :] = [ 4. 8. 88. 96.]
348 cord_individual_obj[indivial_i, :] = [ 5. 8. 83. 91.]
349 cord_individual_obj[indivial_i, :] = [ 6. 7. 105. 112.]
350 cord_individual_obj[indivial_i, :] = [ 7. 9. 109. 118.]
351 cord_individual_obj[indivial_i, :] = [ 8. 9. 114. 123.]
352 cord_individual_obj[indivial_i, :] = [ 9. 9. 108. 117.]
353 cord_individual_obj[indivial_i, :] = [ 10. 8. 156. 164.]
354 cord_individual_obj[indivial_i, :] = [ 11. 8. 133. 141.]
355 cord_individual_obj[indivial_i, :] = [ 12. 9. 91. 100.]
356 cord_individual_obj[indivial_i, :] = [ 13. 7. 139. 146.]
357 cord_individual_obj[indivial_i, :] = [ 14. 8. 142. 150.]
358 cord_individual_obj[indivial_i, :] = [ 15. 8. 127. 135.]
359 cord_individual_obj[indivial_i, :] = [ 16. 10. 116. 126.]
360 cord_individual_obj[indivial_i, :] = [ 17. 7. 112. 119.]
361 cord_individual_obj[indivial_i, :] = [ 18. 10. 101. 111.]
362 cord_individual_obj[indivial_i, :] = [ 19. 8. 85. 93.]
363 cord_individual_obj[indivial_i, :] = [ 20. 9. 177. 186.]
364 cord_individual_obj[indivial_i, :] = [ 21. 9. 64. 73.]
365 cord_individual_obj[indivial_i, :] = [ 22. 9. 132. 141.]
366 cord_individual_obj[indivial_i, :] = [ 23. 8. 74. 82.]
367 cord_individual_obj[indivial_i, :] = [ 24. 6. 146. 152.]
368
369 min(cord_individual_obj[:, 3]) = 73.0
370 histol_G_best_iter[iter, 3] = 73.0
371 Begin iteration:
372
373 iter = 11
374 cord_individual_obj[indivial_i, :] = [ 0. 9. 133. 142.]
375 cord_individual_obj[indivial_i, :] = [ 1. 8. 110. 118.]
376 cord_individual_obj[indivial_i, :] = [ 2. 8. 125. 133.]
377 cord_individual_obj[indivial_i, :] = [ 3. 8. 76. 84.]
378 cord_individual_obj[indivial_i, :] = [ 4. 7. 144. 151.]
379 cord_individual_obj[indivial_i, :] = [ 5. 9. 136. 145.]
380 cord_individual_obj[indivial_i, :] = [ 6. 8. 141. 149.]
381 cord_individual_obj[indivial_i, :] = [ 7. 8. 135. 143.]
382 cord_individual_obj[indivial_i, :] = [ 8. 8. 140. 148.]
383 cord_individual_obj[indivial_i, :] = [ 9. 8. 207. 215.]
384 cord_individual_obj[indivial_i, :] = [ 10. 9. 178. 187.]
385 cord_individual_obj[indivial_i, :] = [ 11. 7. 181. 188.]
386 cord_individual_obj[indivial_i, :] = [ 12. 8. 126. 134.]
387 cord_individual_obj[indivial_i, :] = [ 13. 8. 96. 104.]
388 cord_individual_obj[indivial_i, :] = [ 14. 9. 160. 169.]
389 cord_individual_obj[indivial_i, :] = [ 15. 8. 154. 162.]
390 cord_individual_obj[indivial_i, :] = [ 16. 9. 168. 177.]
391 cord_individual_obj[indivial_i, :] = [ 17. 8. 120. 128.]
392 cord_individual_obj[indivial_i, :] = [ 18. 8. 102. 110.]
393 cord_individual_obj[indivial_i, :] = [ 19. 7. 134. 141.]
394 cord_individual_obj[indivial_i, :] = [ 20. 9. 64. 73.]
395 cord_individual_obj[indivial_i, :] = [ 21. 9. 108. 117.]
396 cord_individual_obj[indivial_i, :] = [ 22. 7. 106. 113.]
397 cord_individual_obj[indivial_i, :] = [ 23. 9. 99. 108.]
398 cord_individual_obj[indivial_i, :] = [ 24. 7. 84. 91.]
399
400 min(cord_individual_obj[:, 3]) = 73.0
401 histol_G_best_iter[iter, 3] = 73.0
402 Begin iteration:
403
404 iter = 12
405 cord_individual_obj[indivial_i, :] = [ 0. 9. 97. 106.]
406 cord_individual_obj[indivial_i, :] = [ 1. 9. 92. 101.]
407 cord_individual_obj[indivial_i, :] = [ 2. 9. 103. 112.]
408 cord_individual_obj[indivial_i, :] = [ 3. 7. 90. 97.]
409 cord_individual_obj[indivial_i, :] = [ 4. 8. 96. 104.]
410 cord_individual_obj[indivial_i, :] = [ 5. 10. 132. 142.]
411 cord_individual_obj[indivial_i, :] = [ 6. 8. 160. 168.]
412 cord_individual_obj[indivial_i, :] = [ 7. 9. 119. 128.]
413 cord_individual_obj[indivial_i, :] = [ 8. 9. 84. 93.]
414 cord_individual_obj[indivial_i, :] = [ 9. 9. 64. 73.]
415 cord_individual_obj[indivial_i, :] = [ 10. 10. 132. 142.]

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416 cord_individual_obj[indivial_i,:] = [11. 8. 83. 91.]
417 cord_individual_obj[indivial_i,:] = [12. 11. 117. 128.]
418 cord_individual_obj[indivial_i,:] = [13. 8. 128. 136.]
419 cord_individual_obj[indivial_i,:] = [14. 7. 139. 146.]
420 cord_individual_obj[indivial_i,:] = [15. 7. 100. 107.]
421 cord_individual_obj[indivial_i,:] = [16. 8. 71. 79.]
422 cord_individual_obj[indivial_i,:] = [17. 7. 115. 122.]
423 cord_individual_obj[indivial_i,:] = [18. 9. 127. 136.]
424 cord_individual_obj[indivial_i,:] = [19. 6. 122. 128.]
425 cord_individual_obj[indivial_i,:] = [20. 9. 128. 137.]
426 cord_individual_obj[indivial_i,:] = [21. 11. 109. 120.]
427 cord_individual_obj[indivial_i,:] = [22. 8. 132. 140.]
428 cord_individual_obj[indivial_i,:] = [23. 8. 104. 112.]
429 cord_individual_obj[indivial_i,:] = [24. 8. 111. 119.]
430
431 min(cord_individual_obj[:,3]) = 73.0
432 histol_G_best_iter[iter,3] = 73.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [0. 9. 97. 106.]
437 cord_individual_obj[indivial_i,:] = [1. 8. 148. 156.]
438 cord_individual_obj[indivial_i,:] = [2. 10. 96. 106.]
439 cord_individual_obj[indivial_i,:] = [3. 9. 93. 102.]
440 cord_individual_obj[indivial_i,:] = [4. 7. 134. 141.]
441 cord_individual_obj[indivial_i,:] = [5. 9. 109. 118.]
442 cord_individual_obj[indivial_i,:] = [6. 9. 64. 73.]
443 cord_individual_obj[indivial_i,:] = [7. 10. 101. 111.]
444 cord_individual_obj[indivial_i,:] = [8. 10. 107. 117.]
445 cord_individual_obj[indivial_i,:] = [9. 9. 152. 161.]
446 cord_individual_obj[indivial_i,:] = [10. 8. 120. 128.]
447 cord_individual_obj[indivial_i,:] = [11. 9. 118. 127.]
448 cord_individual_obj[indivial_i,:] = [12. 8. 95. 103.]
449 cord_individual_obj[indivial_i,:] = [13. 8. 131. 139.]
450 cord_individual_obj[indivial_i,:] = [14. 8. 183. 191.]
451 cord_individual_obj[indivial_i,:] = [15. 8. 95. 103.]
452 cord_individual_obj[indivial_i,:] = [16. 9. 104. 113.]
453 cord_individual_obj[indivial_i,:] = [17. 8. 117. 125.]
454 cord_individual_obj[indivial_i,:] = [18. 7. 97. 104.]
455 cord_individual_obj[indivial_i,:] = [19. 7. 166. 173.]
456 cord_individual_obj[indivial_i,:] = [20. 9. 141. 150.]
457 cord_individual_obj[indivial_i,:] = [21. 10. 123. 133.]
458 cord_individual_obj[indivial_i,:] = [22. 8. 100. 108.]
459 cord_individual_obj[indivial_i,:] = [23. 10. 96. 106.]
460 cord_individual_obj[indivial_i,:] = [24. 8. 93. 101.]
461
462 min(cord_individual_obj[:,3]) = 73.0
463 histol_G_best_iter[iter,3] = 73.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [0. 7. 145. 152.]
468 cord_individual_obj[indivial_i,:] = [1. 8. 78. 86.]
469 cord_individual_obj[indivial_i,:] = [2. 6. 171. 177.]
470 cord_individual_obj[indivial_i,:] = [3. 8. 131. 139.]
471 cord_individual_obj[indivial_i,:] = [4. 8. 141. 149.]
472 cord_individual_obj[indivial_i,:] = [5. 9. 183. 192.]
473 cord_individual_obj[indivial_i,:] = [6. 9. 167. 176.]
474 cord_individual_obj[indivial_i,:] = [7. 10. 104. 114.]
475 cord_individual_obj[indivial_i,:] = [8. 9. 109. 118.]
476 cord_individual_obj[indivial_i,:] = [9. 10. 184. 194.]
477 cord_individual_obj[indivial_i,:] = [10. 9. 140. 149.]
478 cord_individual_obj[indivial_i,:] = [11. 7. 127. 134.]
479 cord_individual_obj[indivial_i,:] = [12. 9. 139. 148.]
480 cord_individual_obj[indivial_i,:] = [13. 8. 100. 108.]
481 cord_individual_obj[indivial_i,:] = [14. 9. 64. 73.]
482 cord_individual_obj[indivial_i,:] = [15. 7. 118. 125.]
483 cord_individual_obj[indivial_i,:] = [16. 9. 126. 135.]
484 cord_individual_obj[indivial_i,:] = [17. 8. 108. 116.]
485 cord_individual_obj[indivial_i,:] = [18. 10. 99. 109.]
486 cord_individual_obj[indivial_i,:] = [19. 8. 104. 112.]
487 cord_individual_obj[indivial_i,:] = [20. 9. 181. 190.]
488 cord_individual_obj[indivial_i,:] = [21. 9. 104. 113.]
489 cord_individual_obj[indivial_i,:] = [22. 9. 148. 157.]
490 cord_individual_obj[indivial_i,:] = [23. 9. 84. 93.]
491 cord_individual_obj[indivial_i,:] = [24. 7. 168. 175.]
492
493 min(cord_individual_obj[:,3]) = 73.0
494 histol_G_best_iter[iter,3] = 73.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [0. 8. 105. 113.]
499 cord_individual_obj[indivial_i,:] = [1. 9. 96. 105.]

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500 cord_individual_obj[indivial_i, :] = [ 2. 9. 135. 144.]
501 cord_individual_obj[indivial_i, :] = [ 3. 7. 147. 154.]
502 cord_individual_obj[indivial_i, :] = [ 4. 7. 124. 131.]
503 cord_individual_obj[indivial_i, :] = [ 5. 9. 96. 105.]
504 cord_individual_obj[indivial_i, :] = [ 6. 7. 136. 143.]
505 cord_individual_obj[indivial_i, :] = [ 7. 9. 140. 149.]
506 cord_individual_obj[indivial_i, :] = [ 8. 9. 115. 124.]
507 cord_individual_obj[indivial_i, :] = [ 9. 9. 64. 73.]
508 cord_individual_obj[indivial_i, :] = [ 10. 10. 98. 108.]
509 cord_individual_obj[indivial_i, :] = [ 11. 8. 140. 148.]
510 cord_individual_obj[indivial_i, :] = [ 12. 10. 158. 168.]
511 cord_individual_obj[indivial_i, :] = [ 13. 9. 89. 98.]
512 cord_individual_obj[indivial_i, :] = [ 14. 8. 124. 132.]
513 cord_individual_obj[indivial_i, :] = [ 15. 7. 114. 121.]
514 cord_individual_obj[indivial_i, :] = [ 16. 8. 85. 93.]
515 cord_individual_obj[indivial_i, :] = [ 17. 8. 115. 123.]
516 cord_individual_obj[indivial_i, :] = [ 18. 9. 131. 140.]
517 cord_individual_obj[indivial_i, :] = [ 19. 7. 134. 141.]
518 cord_individual_obj[indivial_i, :] = [ 20. 7. 178. 185.]
519 cord_individual_obj[indivial_i, :] = [ 21. 9. 85. 94.]
520 cord_individual_obj[indivial_i, :] = [ 22. 9. 136. 145.]
521 cord_individual_obj[indivial_i, :] = [ 23. 8. 70. 78.]
522 cord_individual_obj[indivial_i, :] = [ 24. 8. 167. 175.]
523
524 min(cord_individual_obj[:, 3]) = 73.0
525 histol_G_best_iter[iter, 3] = 73.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i, :] = [ 0. 7. 167. 174.]
530 cord_individual_obj[indivial_i, :] = [ 1. 7. 86. 93.]
531 cord_individual_obj[indivial_i, :] = [ 2. 9. 158. 167.]
532 cord_individual_obj[indivial_i, :] = [ 3. 9. 163. 172.]
533 cord_individual_obj[indivial_i, :] = [ 4. 9. 84. 93.]
534 cord_individual_obj[indivial_i, :] = [ 5. 9. 198. 207.]
535 cord_individual_obj[indivial_i, :] = [ 6. 8. 195. 203.]
536 cord_individual_obj[indivial_i, :] = [ 7. 7. 79. 86.]
537 cord_individual_obj[indivial_i, :] = [ 8. 9. 121. 130.]
538 cord_individual_obj[indivial_i, :] = [ 9. 10. 151. 161.]
539 cord_individual_obj[indivial_i, :] = [ 10. 9. 126. 135.]
540 cord_individual_obj[indivial_i, :] = [ 11. 7. 187. 194.]
541 cord_individual_obj[indivial_i, :] = [ 12. 9. 96. 105.]
542 cord_individual_obj[indivial_i, :] = [ 13. 9. 131. 140.]
543 cord_individual_obj[indivial_i, :] = [ 14. 9. 111. 120.]
544 cord_individual_obj[indivial_i, :] = [ 15. 8. 163. 171.]
545 cord_individual_obj[indivial_i, :] = [ 16. 10. 181. 191.]
546 cord_individual_obj[indivial_i, :] = [ 17. 7. 116. 123.]
547 cord_individual_obj[indivial_i, :] = [ 18. 8. 174. 182.]
548 cord_individual_obj[indivial_i, :] = [ 19. 7. 107. 114.]
549 cord_individual_obj[indivial_i, :] = [ 20. 9. 64. 73.]
550 cord_individual_obj[indivial_i, :] = [ 21. 9. 116. 125.]
551 cord_individual_obj[indivial_i, :] = [ 22. 8. 127. 135.]
552 cord_individual_obj[indivial_i, :] = [ 23. 10. 117. 127.]
553 cord_individual_obj[indivial_i, :] = [ 24. 8. 144. 152.]
554
555 min(cord_individual_obj[:, 3]) = 73.0
556 histol_G_best_iter[iter, 3] = 73.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i, :] = [ 0. 8. 101. 109.]
561 cord_individual_obj[indivial_i, :] = [ 1. 9. 89. 98.]
562 cord_individual_obj[indivial_i, :] = [ 2. 7. 122. 129.]
563 cord_individual_obj[indivial_i, :] = [ 3. 6. 100. 106.]
564 cord_individual_obj[indivial_i, :] = [ 4. 7. 139. 146.]
565 cord_individual_obj[indivial_i, :] = [ 5. 9. 64. 73.]
566 cord_individual_obj[indivial_i, :] = [ 6. 9. 90. 99.]
567 cord_individual_obj[indivial_i, :] = [ 7. 8. 72. 80.]
568 cord_individual_obj[indivial_i, :] = [ 8. 8. 97. 105.]
569 cord_individual_obj[indivial_i, :] = [ 9. 9. 129. 138.]
570 cord_individual_obj[indivial_i, :] = [ 10. 8. 136. 144.]
571 cord_individual_obj[indivial_i, :] = [ 11. 8. 182. 190.]
572 cord_individual_obj[indivial_i, :] = [ 12. 8. 121. 129.]
573 cord_individual_obj[indivial_i, :] = [ 13. 9. 111. 120.]
574 cord_individual_obj[indivial_i, :] = [ 14. 9. 108. 117.]
575 cord_individual_obj[indivial_i, :] = [ 15. 8. 98. 106.]
576 cord_individual_obj[indivial_i, :] = [ 16. 7. 164. 171.]
577 cord_individual_obj[indivial_i, :] = [ 17. 8. 123. 131.]
578 cord_individual_obj[indivial_i, :] = [ 18. 8. 153. 161.]
579 cord_individual_obj[indivial_i, :] = [ 19. 8. 96. 104.]
580 cord_individual_obj[indivial_i, :] = [ 20. 9. 128. 137.]
581 cord_individual_obj[indivial_i, :] = [ 21. 8. 137. 145.]
582 cord_individual_obj[indivial_i, :] = [ 22. 8. 79. 87.]
583 cord_individual_obj[indivial_i, :] = [ 23. 7. 80. 87.]

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unknown

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584     cord_individual_obj[indivial_i, :] = [ 24.  8. 110. 118.]
585
586     min(cord_individual_obj[:, 3]) = 73.0
587     historl_G_best_iter[iter, 3] = 73.0
588 Begin iteration:
589
590 iter = 18
591     cord_individual_obj[indivial_i, :] = [ 0.  9. 90. 99.]
592     cord_individual_obj[indivial_i, :] = [ 1.  9. 112. 121.]
593     cord_individual_obj[indivial_i, :] = [ 2.  7. 77. 84.]
594     cord_individual_obj[indivial_i, :] = [ 3.  7. 106. 113.]
595     cord_individual_obj[indivial_i, :] = [ 4.  8. 103. 111.]
596     cord_individual_obj[indivial_i, :] = [ 5.  8. 113. 121.]
597     cord_individual_obj[indivial_i, :] = [ 6.  8. 165. 173.]
598     cord_individual_obj[indivial_i, :] = [ 7.  9. 81. 90.]
599     cord_individual_obj[indivial_i, :] = [ 8.  8. 91. 99.]
600     cord_individual_obj[indivial_i, :] = [ 9.  9. 132. 141.]
601     cord_individual_obj[indivial_i, :] = [10.  9. 245. 254.]
602     cord_individual_obj[indivial_i, :] = [11.  9. 64. 73.]
603     cord_individual_obj[indivial_i, :] = [12.  8. 123. 131.]
604     cord_individual_obj[indivial_i, :] = [13.  7. 73. 80.]
605     cord_individual_obj[indivial_i, :] = [14.  8. 131. 139.]
606     cord_individual_obj[indivial_i, :] = [15.  7. 68. 75.]
607     cord_individual_obj[indivial_i, :] = [16.  7. 118. 125.]
608     cord_individual_obj[indivial_i, :] = [17.  8. 128. 136.]
609     cord_individual_obj[indivial_i, :] = [18.  8. 102. 110.]
610     cord_individual_obj[indivial_i, :] = [19.  8. 72. 80.]
611     cord_individual_obj[indivial_i, :] = [20.  8. 115. 123.]
612     cord_individual_obj[indivial_i, :] = [21. 10. 193. 203.]
613     cord_individual_obj[indivial_i, :] = [22.  9. 146. 155.]
614     cord_individual_obj[indivial_i, :] = [23.  7. 141. 148.]
615     cord_individual_obj[indivial_i, :] = [24.  8. 87. 95.]
616
617     min(cord_individual_obj[:, 3]) = 73.0
618     historl_G_best_iter[iter, 3] = 73.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0.  7. 140. 147.]
623     cord_individual_obj[indivial_i, :] = [ 1.  8. 127. 135.]
624     cord_individual_obj[indivial_i, :] = [ 2.  9. 126. 135.]
625     cord_individual_obj[indivial_i, :] = [ 3.  8. 99. 107.]
626     cord_individual_obj[indivial_i, :] = [ 4.  8. 133. 141.]
627     cord_individual_obj[indivial_i, :] = [ 5.  9. 170. 179.]
628     cord_individual_obj[indivial_i, :] = [ 6.  8. 146. 154.]
629     cord_individual_obj[indivial_i, :] = [ 7. 10. 88. 98.]
630     cord_individual_obj[indivial_i, :] = [ 8.  8. 148. 156.]
631     cord_individual_obj[indivial_i, :] = [ 9.  9. 147. 156.]
632     cord_individual_obj[indivial_i, :] = [10.  9. 64. 73.]
633     cord_individual_obj[indivial_i, :] = [11.  7. 156. 163.]
634     cord_individual_obj[indivial_i, :] = [12.  9. 149. 158.]
635     cord_individual_obj[indivial_i, :] = [13.  9. 135. 144.]
636     cord_individual_obj[indivial_i, :] = [14.  7. 93. 100.]
637     cord_individual_obj[indivial_i, :] = [15.  8. 135. 143.]
638     cord_individual_obj[indivial_i, :] = [16. 10. 103. 113.]
639     cord_individual_obj[indivial_i, :] = [17.  8. 141. 149.]
640     cord_individual_obj[indivial_i, :] = [18.  7. 87. 94.]
641     cord_individual_obj[indivial_i, :] = [19.  7. 111. 118.]
642     cord_individual_obj[indivial_i, :] = [20.  9. 92. 101.]
643     cord_individual_obj[indivial_i, :] = [21.  7. 114. 121.]
644     cord_individual_obj[indivial_i, :] = [22.  9. 91. 100.]
645     cord_individual_obj[indivial_i, :] = [23.  8. 118. 126.]
646     cord_individual_obj[indivial_i, :] = [24.  7. 180. 187.]
647
648     min(cord_individual_obj[:, 3]) = 73.0
649     historl_G_best_iter[iter, 3] = 73.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0. 10. 118. 128.]
654     cord_individual_obj[indivial_i, :] = [ 1.  9. 111. 120.]
655     cord_individual_obj[indivial_i, :] = [ 2.  8. 104. 112.]
656     cord_individual_obj[indivial_i, :] = [ 3.  8. 102. 110.]
657     cord_individual_obj[indivial_i, :] = [ 4.  9. 140. 149.]
658     cord_individual_obj[indivial_i, :] = [ 5.  8. 135. 143.]
659     cord_individual_obj[indivial_i, :] = [ 6.  8. 111. 119.]
660     cord_individual_obj[indivial_i, :] = [ 7.  8. 98. 106.]
661     cord_individual_obj[indivial_i, :] = [ 8.  9. 136. 145.]
662     cord_individual_obj[indivial_i, :] = [ 9.  8. 151. 159.]
663     cord_individual_obj[indivial_i, :] = [10.  8. 144. 152.]
664     cord_individual_obj[indivial_i, :] = [11.  7. 139. 146.]
665     cord_individual_obj[indivial_i, :] = [12. 10. 165. 175.]
666     cord_individual_obj[indivial_i, :] = [13.  7. 174. 181.]
667     cord_individual_obj[indivial_i, :] = [14. 10. 81. 91.]
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668 cord_individual_obj[indivial_i,:] = [ 15. 7. 93. 100.]
669 cord_individual_obj[indivial_i,:] = [ 16. 11. 138. 149.]
670 cord_individual_obj[indivial_i,:] = [ 17. 6. 155. 161.]
671 cord_individual_obj[indivial_i,:] = [ 18. 7. 91. 98.]
672 cord_individual_obj[indivial_i,:] = [ 19. 9. 131. 140.]
673 cord_individual_obj[indivial_i,:] = [ 20. 7. 178. 185.]
674 cord_individual_obj[indivial_i,:] = [ 21. 10. 118. 128.]
675 cord_individual_obj[indivial_i,:] = [ 22. 10. 97. 107.]
676 cord_individual_obj[indivial_i,:] = [ 23. 8. 96. 104.]
677 cord_individual_obj[indivial_i,:] = [ 24. 9. 64. 73.]
678
679 min(cord_individual_obj[:,3]) = 73.0
680 historl_G_best_iter[iter,3] = 73.0
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: [ 9. 2.5 3.5 12. 17. 18. 16.5 24. 1.5 10.5 25.5 4.5 6.5 3.5]
692 time: [0. 0. 6. 2. 0. 3. 6. 3. 1. 5. 0. 3. 1. 5.]
693 num_QC: [7. 3. 2. 4. 2. 2. 2. 1. 2. 5. 2. 5. 5. 4.]
694 Objective function values and some other indicators:
695 Obj0 = 9.00 Obj1 = 64.00 Obj0 + Obj1 = 73.00
696 Total movement of crane: 0.00
697 Total waiting time in berth position: 35.00
698 Total index of q during berthing: 684.00
699 Specific arrangement for each vessel:
700 V_id: 0 li: 8.0 xi: 9.0 bow of i: 5.0 tail of i: 13.0 gama_i0: 0.0 gama_i1: 0.0
701 140.0 work load gap_i: 0 gama_i1 + 1: 1.0 gama_i1 - gama_i0: 0.0 duration_time_i: 1.0 demand_i: 140.0 work load_i:
702 V_id: 1 li: 5.0 xi: 2.5 bow of i: 0.0 tail of i: 5.0 gama_i0: 0.0 gama_i1: 0.0
703 60.0 work load gap_i: 0 gama_i1 + 1: 1.0 gama_i1 - gama_i0: 0.0 duration_time_i: 1.0 demand_i: 60.0 work load_i:
704 V_id: 2 li: 7.0 xi: 3.5 bow of i: 0.0 tail of i: 7.0 gama_i0: 6.0 gama_i1: 9.0
705 160.0 work load gap_i: 0 gama_i1 + 1: 10.0 gama_i1 - gama_i0: 3.0 duration_time_i: 4.0 demand_i: 160.0 work
706 V_id: 3 li: 4.0 xi: 12.0 bow of i: 10.0 tail of i: 14.0 gama_i0: 2.0 gama_i1: 3
707 .0 work load gap_i: 0 gama_i1 + 1: 4.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work
708 V_id: 4 li: 8.0 xi: 17.0 bow of i: 13.0 tail of i: 21.0 gama_i0: 0.0 gama_i1: 1
709 .0 work load gap_i: 0 gama_i1 + 1: 2.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 60.0 work
710 V_id: 5 li: 8.0 xi: 18.0 bow of i: 14.0 tail of i: 22.0 gama_i0: 3.0 gama_i1: 5
711 .0 work load gap_i: 0 gama_i1 + 1: 6.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 120.0 work
712 V_id: 6 li: 5.0 xi: 16.5 bow of i: 14.0 tail of i: 19.0 gama_i0: 6.0 gama_i1: 9
713 .0 work load gap_i: 0 gama_i1 + 1: 10.0 gama_i1 - gama_i0: 3.0 duration_time_i: 4.0 demand_i: 140.0 work
714 V_id: 7 li: 4.0 xi: 24.0 bow of i: 22.0 tail of i: 26.0 gama_i0: 3.0 gama_i1: 6
715 .0 work load gap_i: 0 gama_i1 + 1: 7.0 gama_i1 - gama_i0: 3.0 duration_time_i: 4.0 demand_i: 80.0 work
716 V_id: 8 li: 3.0 xi: 1.5 bow of i: 0.0 tail of i: 3.0 gama_i0: 1.0 gama_i1: 2
717 .0 work load gap_i: 0 gama_i1 + 1: 3.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 60.0 work load_i:
718 V_id: 9 li: 7.0 xi: 10.5 bow of i: 7.0 tail of i: 14.0 gama_i0: 5.0 gama_i1: 6
719 .0 work load gap_i: 0 gama_i1 + 1: 7.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 140.0 work
720 V_id: 10 li: 9.0 xi: 25.5 bow of i: 21.0 tail of i: 30.0 gama_i0: 0.0 gama_i1: 1
721 : 2.0 work load gap_i: 0 gama_i1 + 1: 3.0 gama_i1 - gama_i0: 2.0 duration_time_i: 3.0 demand_i: 120.0 work
722 V_id: 11 li: 9.0 xi: 4.5 bow of i: 0.0 tail of i: 9.0 gama_i0: 3.0 gama_i1: 4.0
723 120.0 work load gap_i: 0 gama_i1 + 1: 5.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work load_i:
724 V_id: 12 li: 7.0 xi: 6.5 bow of i: 3.0 tail of i: 10.0 gama_i0: 1.0 gama_i1: 2
725 .0 work load gap_i: 0 gama_i1 + 1: 3.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 140.0 work
726 V_id: 13 li: 7.0 xi: 3.5 bow of i: 0.0 tail of i: 7.0 gama_i0: 5.0 gama_i1: 5
727 80.0 work load gap_i: 0 gama_i1 + 1: 6.0 gama_i1 - gama_i0: 0.0 duration_time_i: 1.0 demand_i: 80.0 work load_i:
728
729 Algorithm finished and the total CPU time: 374 s
730 End
731
732

```