

unknown

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80 cord_individual_obj[indivial_i,:] = [ 16. 12. 113. 125.]
81 cord_individual_obj[indivial_i,:] = [ 17. 10. 118. 128.]
82 cord_individual_obj[indivial_i,:] = [ 18. 11. 116. 127.]
83 cord_individual_obj[indivial_i,:] = [ 19. 13. 132. 145.]
84 cord_individual_obj[indivial_i,:] = [ 20. 10. 108. 118.]
85 cord_individual_obj[indivial_i,:] = [ 21. 11. 133. 144.]
86 cord_individual_obj[indivial_i,:] = [ 22. 11. 138. 149.]
87 cord_individual_obj[indivial_i,:] = [ 23. 10. 100. 110.]
88 cord_individual_obj[indivial_i,:] = [ 24. 9. 124. 133.]
89
90 min(cord_individual_obj[:,3]) = 86.0
91 historl_G_best_iter[iter, 3] = 86.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 9. 140. 149.]
96 cord_individual_obj[indivial_i,:] = [ 1. 9. 135. 144.]
97 cord_individual_obj[indivial_i,:] = [ 2. 9. 115. 124.]
98 cord_individual_obj[indivial_i,:] = [ 3. 9. 98. 107.]
99 cord_individual_obj[indivial_i,:] = [ 4. 10. 141. 151.]
100 cord_individual_obj[indivial_i,:] = [ 5. 10. 149. 159.]
101 cord_individual_obj[indivial_i,:] = [ 6. 11. 127. 138.]
102 cord_individual_obj[indivial_i,:] = [ 7. 8. 173. 181.]
103 cord_individual_obj[indivial_i,:] = [ 8. 10. 73. 83.]
104 cord_individual_obj[indivial_i,:] = [ 9. 12. 166. 178.]
105 cord_individual_obj[indivial_i,:] = [ 10. 9. 156. 165.]
106 cord_individual_obj[indivial_i,:] = [ 11. 10. 113. 123.]
107 cord_individual_obj[indivial_i,:] = [ 12. 12. 158. 170.]
108 cord_individual_obj[indivial_i,:] = [ 13. 13. 154. 167.]
109 cord_individual_obj[indivial_i,:] = [ 14. 8. 117. 125.]
110 cord_individual_obj[indivial_i,:] = [ 15. 7. 79. 86.]
111 cord_individual_obj[indivial_i,:] = [ 16. 11. 161. 172.]
112 cord_individual_obj[indivial_i,:] = [ 17. 10. 151. 161.]
113 cord_individual_obj[indivial_i,:] = [ 18. 10. 132. 142.]
114 cord_individual_obj[indivial_i,:] = [ 19. 12. 112. 124.]
115 cord_individual_obj[indivial_i,:] = [ 20. 10. 120. 130.]
116 cord_individual_obj[indivial_i,:] = [ 21. 9. 96. 105.]
117 cord_individual_obj[indivial_i,:] = [ 22. 10. 101. 111.]
118 cord_individual_obj[indivial_i,:] = [ 23. 10. 125. 135.]
119 cord_individual_obj[indivial_i,:] = [ 24. 10. 123. 133.]
120
121 min(cord_individual_obj[:,3]) = 83.0
122 historl_G_best_iter[iter, 3] = 83.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 10. 166. 176.]
127 cord_individual_obj[indivial_i,:] = [ 1. 11. 145. 156.]
128 cord_individual_obj[indivial_i,:] = [ 2. 10. 142. 152.]
129 cord_individual_obj[indivial_i,:] = [ 3. 10. 113. 123.]
130 cord_individual_obj[indivial_i,:] = [ 4. 9. 128. 137.]
131 cord_individual_obj[indivial_i,:] = [ 5. 8. 167. 175.]
132 cord_individual_obj[indivial_i,:] = [ 6. 9. 103. 112.]
133 cord_individual_obj[indivial_i,:] = [ 7. 10. 73. 83.]
134 cord_individual_obj[indivial_i,:] = [ 8. 13. 155. 168.]
135 cord_individual_obj[indivial_i,:] = [ 9. 9. 128. 137.]
136 cord_individual_obj[indivial_i,:] = [ 10. 11. 99. 110.]
137 cord_individual_obj[indivial_i,:] = [ 11. 11. 116. 127.]
138 cord_individual_obj[indivial_i,:] = [ 12. 9. 110. 119.]
139 cord_individual_obj[indivial_i,:] = [ 13. 10. 175. 185.]
140 cord_individual_obj[indivial_i,:] = [ 14. 9. 117. 126.]
141 cord_individual_obj[indivial_i,:] = [ 15. 10. 88. 98.]
142 cord_individual_obj[indivial_i,:] = [ 16. 9. 165. 174.]
143 cord_individual_obj[indivial_i,:] = [ 17. 11. 167. 178.]
144 cord_individual_obj[indivial_i,:] = [ 18. 9. 128. 137.]
145 cord_individual_obj[indivial_i,:] = [ 19. 11. 194. 205.]
146 cord_individual_obj[indivial_i,:] = [ 20. 11. 154. 165.]
147 cord_individual_obj[indivial_i,:] = [ 21. 8. 104. 112.]
148 cord_individual_obj[indivial_i,:] = [ 22. 11. 102. 113.]
149 cord_individual_obj[indivial_i,:] = [ 23. 10. 139. 149.]
150 cord_individual_obj[indivial_i,:] = [ 24. 11. 143. 154.]
151
152 min(cord_individual_obj[:,3]) = 83.0
153 historl_G_best_iter[iter, 3] = 83.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 8. 135. 143.]
158 cord_individual_obj[indivial_i,:] = [ 1. 13. 84. 97.]
159 cord_individual_obj[indivial_i,:] = [ 2. 10. 162. 172.]
160 cord_individual_obj[indivial_i,:] = [ 3. 8. 136. 144.]
161 cord_individual_obj[indivial_i,:] = [ 4. 10. 172. 182.]
162 cord_individual_obj[indivial_i,:] = [ 5. 9. 104. 113.]
163 cord_individual_obj[indivial_i,:] = [ 6. 10. 122. 132.]

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164 cord_individual_obj[indivial_i,:] = [ 7. 10. 127. 137.]
165 cord_individual_obj[indivial_i,:] = [ 8. 10. 165. 175.]
166 cord_individual_obj[indivial_i,:] = [ 9. 12. 194. 206.]
167 cord_individual_obj[indivial_i,:] = [ 10. 9. 118. 127.]
168 cord_individual_obj[indivial_i,:] = [ 11. 9. 126. 135.]
169 cord_individual_obj[indivial_i,:] = [ 12. 10. 144. 154.]
170 cord_individual_obj[indivial_i,:] = [ 13. 10. 124. 134.]
171 cord_individual_obj[indivial_i,:] = [ 14. 9. 178. 187.]
172 cord_individual_obj[indivial_i,:] = [ 15. 11. 146. 157.]
173 cord_individual_obj[indivial_i,:] = [ 16. 11. 139. 150.]
174 cord_individual_obj[indivial_i,:] = [ 17. 10. 149. 159.]
175 cord_individual_obj[indivial_i,:] = [ 18. 11. 106. 117.]
176 cord_individual_obj[indivial_i,:] = [ 19. 10. 73. 83.]
177 cord_individual_obj[indivial_i,:] = [ 20. 10. 83. 93.]
178 cord_individual_obj[indivial_i,:] = [ 21. 10. 122. 132.]
179 cord_individual_obj[indivial_i,:] = [ 22. 11. 139. 150.]
180 cord_individual_obj[indivial_i,:] = [ 23. 9. 176. 185.]
181 cord_individual_obj[indivial_i,:] = [ 24. 10. 104. 114.]
182
183 min(cord_individual_obj[:,3]) = 83.0
184 historl_G_best_iter[iter,3] = 83.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i,:] = [ 0. 12. 102. 114.]
189 cord_individual_obj[indivial_i,:] = [ 1. 10. 166. 176.]
190 cord_individual_obj[indivial_i,:] = [ 2. 9. 142. 151.]
191 cord_individual_obj[indivial_i,:] = [ 3. 11. 92. 103.]
192 cord_individual_obj[indivial_i,:] = [ 4. 9. 158. 167.]
193 cord_individual_obj[indivial_i,:] = [ 5. 11. 165. 176.]
194 cord_individual_obj[indivial_i,:] = [ 6. 10. 104. 114.]
195 cord_individual_obj[indivial_i,:] = [ 7. 9. 158. 167.]
196 cord_individual_obj[indivial_i,:] = [ 8. 12. 147. 159.]
197 cord_individual_obj[indivial_i,:] = [ 9. 10. 73. 83.]
198 cord_individual_obj[indivial_i,:] = [ 10. 11. 102. 113.]
199 cord_individual_obj[indivial_i,:] = [ 11. 10. 153. 163.]
200 cord_individual_obj[indivial_i,:] = [ 12. 9. 157. 166.]
201 cord_individual_obj[indivial_i,:] = [ 13. 9. 177. 186.]
202 cord_individual_obj[indivial_i,:] = [ 14. 10. 147. 157.]
203 cord_individual_obj[indivial_i,:] = [ 15. 11. 127. 138.]
204 cord_individual_obj[indivial_i,:] = [ 16. 11. 149. 160.]
205 cord_individual_obj[indivial_i,:] = [ 17. 11. 141. 152.]
206 cord_individual_obj[indivial_i,:] = [ 18. 10. 129. 139.]
207 cord_individual_obj[indivial_i,:] = [ 19. 9. 162. 171.]
208 cord_individual_obj[indivial_i,:] = [ 20. 11. 173. 184.]
209 cord_individual_obj[indivial_i,:] = [ 21. 9. 160. 169.]
210 cord_individual_obj[indivial_i,:] = [ 22. 11. 100. 111.]
211 cord_individual_obj[indivial_i,:] = [ 23. 10. 180. 190.]
212 cord_individual_obj[indivial_i,:] = [ 24. 10. 153. 163.]
213
214 min(cord_individual_obj[:,3]) = 83.0
215 historl_G_best_iter[iter,3] = 83.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i,:] = [ 0. 10. 195. 205.]
220 cord_individual_obj[indivial_i,:] = [ 1. 9. 113. 122.]
221 cord_individual_obj[indivial_i,:] = [ 2. 10. 143. 153.]
222 cord_individual_obj[indivial_i,:] = [ 3. 10. 160. 170.]
223 cord_individual_obj[indivial_i,:] = [ 4. 9. 184. 193.]
224 cord_individual_obj[indivial_i,:] = [ 5. 10. 112. 122.]
225 cord_individual_obj[indivial_i,:] = [ 6. 8. 138. 146.]
226 cord_individual_obj[indivial_i,:] = [ 7. 8. 142. 150.]
227 cord_individual_obj[indivial_i,:] = [ 8. 9. 127. 136.]
228 cord_individual_obj[indivial_i,:] = [ 9. 11. 122. 133.]
229 cord_individual_obj[indivial_i,:] = [ 10. 9. 105. 114.]
230 cord_individual_obj[indivial_i,:] = [ 11. 8. 116. 124.]
231 cord_individual_obj[indivial_i,:] = [ 12. 10. 102. 112.]
232 cord_individual_obj[indivial_i,:] = [ 13. 8. 143. 151.]
233 cord_individual_obj[indivial_i,:] = [ 14. 10. 187. 197.]
234 cord_individual_obj[indivial_i,:] = [ 15. 10. 134. 144.]
235 cord_individual_obj[indivial_i,:] = [ 16. 10. 132. 142.]
236 cord_individual_obj[indivial_i,:] = [ 17. 10. 176. 186.]
237 cord_individual_obj[indivial_i,:] = [ 18. 9. 170. 179.]
238 cord_individual_obj[indivial_i,:] = [ 19. 10. 101. 111.]
239 cord_individual_obj[indivial_i,:] = [ 20. 9. 162. 171.]
240 cord_individual_obj[indivial_i,:] = [ 21. 9. 175. 184.]
241 cord_individual_obj[indivial_i,:] = [ 22. 13. 122. 135.]
242 cord_individual_obj[indivial_i,:] = [ 23. 10. 73. 83.]
243 cord_individual_obj[indivial_i,:] = [ 24. 10. 125. 135.]
244
245 min(cord_individual_obj[:,3]) = 83.0
246 historl_G_best_iter[iter,3] = 83.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0. 10. 73. 83.]
251 cord_individual_obj[indivial_i, :] = [ 1. 9. 117. 126.]
252 cord_individual_obj[indivial_i, :] = [ 2. 10. 127. 137.]
253 cord_individual_obj[indivial_i, :] = [ 3. 11. 161. 172.]
254 cord_individual_obj[indivial_i, :] = [ 4. 11. 136. 147.]
255 cord_individual_obj[indivial_i, :] = [ 5. 9. 137. 146.]
256 cord_individual_obj[indivial_i, :] = [ 6. 10. 141. 151.]
257 cord_individual_obj[indivial_i, :] = [ 7. 8. 106. 114.]
258 cord_individual_obj[indivial_i, :] = [ 8. 9. 161. 170.]
259 cord_individual_obj[indivial_i, :] = [ 9. 10. 170. 180.]
260 cord_individual_obj[indivial_i, :] = [ 10. 12. 153. 165.]
261 cord_individual_obj[indivial_i, :] = [ 11. 10. 129. 139.]
262 cord_individual_obj[indivial_i, :] = [ 12. 10. 116. 126.]
263 cord_individual_obj[indivial_i, :] = [ 13. 12. 150. 162.]
264 cord_individual_obj[indivial_i, :] = [ 14. 8. 118. 126.]
265 cord_individual_obj[indivial_i, :] = [ 15. 12. 126. 138.]
266 cord_individual_obj[indivial_i, :] = [ 16. 10. 95. 105.]
267 cord_individual_obj[indivial_i, :] = [ 17. 10. 124. 134.]
268 cord_individual_obj[indivial_i, :] = [ 18. 9. 158. 167.]
269 cord_individual_obj[indivial_i, :] = [ 19. 11. 94. 105.]
270 cord_individual_obj[indivial_i, :] = [ 20. 10. 106. 116.]
271 cord_individual_obj[indivial_i, :] = [ 21. 9. 144. 153.]
272 cord_individual_obj[indivial_i, :] = [ 22. 10. 163. 173.]
273 cord_individual_obj[indivial_i, :] = [ 23. 11. 151. 162.]
274 cord_individual_obj[indivial_i, :] = [ 24. 11. 139. 150.]
275

276 min(cord_individual_obj[:, 3]) = 83.0
277 historl_G_best_iter[iter, 3] = 83.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0. 10. 145. 155.]
282 cord_individual_obj[indivial_i, :] = [ 1. 9. 100. 109.]
283 cord_individual_obj[indivial_i, :] = [ 2. 11. 157. 168.]
284 cord_individual_obj[indivial_i, :] = [ 3. 9. 108. 117.]
285 cord_individual_obj[indivial_i, :] = [ 4. 9. 118. 127.]
286 cord_individual_obj[indivial_i, :] = [ 5. 10. 93. 103.]
287 cord_individual_obj[indivial_i, :] = [ 6. 11. 133. 144.]
288 cord_individual_obj[indivial_i, :] = [ 7. 10. 182. 192.]
289 cord_individual_obj[indivial_i, :] = [ 8. 10. 112. 122.]
290 cord_individual_obj[indivial_i, :] = [ 9. 10. 73. 83.]
291 cord_individual_obj[indivial_i, :] = [ 10. 10. 118. 128.]
292 cord_individual_obj[indivial_i, :] = [ 11. 10. 111. 121.]
293 cord_individual_obj[indivial_i, :] = [ 12. 11. 181. 192.]
294 cord_individual_obj[indivial_i, :] = [ 13. 10. 174. 184.]
295 cord_individual_obj[indivial_i, :] = [ 14. 10. 98. 108.]
296 cord_individual_obj[indivial_i, :] = [ 15. 12. 135. 147.]
297 cord_individual_obj[indivial_i, :] = [ 16. 12. 190. 202.]
298 cord_individual_obj[indivial_i, :] = [ 17. 11. 121. 132.]
299 cord_individual_obj[indivial_i, :] = [ 18. 10. 118. 128.]
300 cord_individual_obj[indivial_i, :] = [ 19. 10. 154. 164.]
301 cord_individual_obj[indivial_i, :] = [ 20. 11. 178. 189.]
302 cord_individual_obj[indivial_i, :] = [ 21. 10. 202. 212.]
303 cord_individual_obj[indivial_i, :] = [ 22. 13. 131. 144.]
304 cord_individual_obj[indivial_i, :] = [ 23. 11. 100. 111.]
305 cord_individual_obj[indivial_i, :] = [ 24. 9. 133. 142.]
306

307 min(cord_individual_obj[:, 3]) = 83.0
308 historl_G_best_iter[iter, 3] = 83.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0. 10. 138. 148.]
313 cord_individual_obj[indivial_i, :] = [ 1. 10. 138. 148.]
314 cord_individual_obj[indivial_i, :] = [ 2. 11. 126. 137.]
315 cord_individual_obj[indivial_i, :] = [ 3. 11. 171. 182.]
316 cord_individual_obj[indivial_i, :] = [ 4. 10. 114. 124.]
317 cord_individual_obj[indivial_i, :] = [ 5. 9. 77. 86.]
318 cord_individual_obj[indivial_i, :] = [ 6. 13. 171. 184.]
319 cord_individual_obj[indivial_i, :] = [ 7. 10. 125. 135.]
320 cord_individual_obj[indivial_i, :] = [ 8. 10. 153. 163.]
321 cord_individual_obj[indivial_i, :] = [ 9. 11. 161. 172.]
322 cord_individual_obj[indivial_i, :] = [ 10. 12. 160. 172.]
323 cord_individual_obj[indivial_i, :] = [ 11. 11. 109. 120.]
324 cord_individual_obj[indivial_i, :] = [ 12. 9. 110. 119.]
325 cord_individual_obj[indivial_i, :] = [ 13. 10. 220. 230.]
326 cord_individual_obj[indivial_i, :] = [ 14. 10. 94. 104.]
327 cord_individual_obj[indivial_i, :] = [ 15. 12. 100. 112.]
328 cord_individual_obj[indivial_i, :] = [ 16. 12. 130. 142.]
329 cord_individual_obj[indivial_i, :] = [ 17. 11. 132. 143.]
330 cord_individual_obj[indivial_i, :] = [ 18. 10. 146. 156.]
331 cord_individual_obj[indivial_i, :] = [ 19. 12. 188. 200.]

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unknown

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332 cord_individual_obj[indivial_i, :] = [ 20. 10. 133. 143.]  
333 cord_individual_obj[indivial_i, :] = [ 21. 10. 73. 83.]  
334 cord_individual_obj[indivial_i, :] = [ 22. 11. 132. 143.]  
335 cord_individual_obj[indivial_i, :] = [ 23. 9. 123. 132.]  
336 cord_individual_obj[indivial_i, :] = [ 24. 10. 127. 137.]  
337  
338 min(cord_individual_obj[:, 3]) = 83.0  
339 histol_G_best_iter[iter, 3] = 83.0  
340 Begin iteration:  
341  
342 iter = 10  
343 cord_individual_obj[indivial_i, :] = [ 0. 10. 137. 147.]  
344 cord_individual_obj[indivial_i, :] = [ 1. 10. 131. 141.]  
345 cord_individual_obj[indivial_i, :] = [ 2. 9. 173. 182.]  
346 cord_individual_obj[indivial_i, :] = [ 3. 10. 87. 97.]  
347 cord_individual_obj[indivial_i, :] = [ 4. 10. 127. 137.]  
348 cord_individual_obj[indivial_i, :] = [ 5. 10. 125. 135.]  
349 cord_individual_obj[indivial_i, :] = [ 6. 10. 148. 158.]  
350 cord_individual_obj[indivial_i, :] = [ 7. 11. 139. 150.]  
351 cord_individual_obj[indivial_i, :] = [ 8. 10. 119. 129.]  
352 cord_individual_obj[indivial_i, :] = [ 9. 8. 146. 154.]  
353 cord_individual_obj[indivial_i, :] = [ 10. 10. 130. 140.]  
354 cord_individual_obj[indivial_i, :] = [ 11. 9. 132. 141.]  
355 cord_individual_obj[indivial_i, :] = [ 12. 10. 211. 221.]  
356 cord_individual_obj[indivial_i, :] = [ 13. 10. 73. 83.]  
357 cord_individual_obj[indivial_i, :] = [ 14. 9. 95. 104.]  
358 cord_individual_obj[indivial_i, :] = [ 15. 9. 126. 135.]  
359 cord_individual_obj[indivial_i, :] = [ 16. 12. 180. 192.]  
360 cord_individual_obj[indivial_i, :] = [ 17. 10. 148. 158.]  
361 cord_individual_obj[indivial_i, :] = [ 18. 10. 118. 128.]  
362 cord_individual_obj[indivial_i, :] = [ 19. 9. 174. 183.]  
363 cord_individual_obj[indivial_i, :] = [ 20. 10. 173. 183.]  
364 cord_individual_obj[indivial_i, :] = [ 21. 10. 178. 188.]  
365 cord_individual_obj[indivial_i, :] = [ 22. 11. 116. 127.]  
366 cord_individual_obj[indivial_i, :] = [ 23. 11. 138. 149.]  
367 cord_individual_obj[indivial_i, :] = [ 24. 9. 135. 144.]  
368  
369 min(cord_individual_obj[:, 3]) = 83.0  
370 histol_G_best_iter[iter, 3] = 83.0  
371 Begin iteration:  
372  
373 iter = 11  
374 cord_individual_obj[indivial_i, :] = [ 0. 11. 183. 194.]  
375 cord_individual_obj[indivial_i, :] = [ 1. 9. 107. 116.]  
376 cord_individual_obj[indivial_i, :] = [ 2. 11. 147. 158.]  
377 cord_individual_obj[indivial_i, :] = [ 3. 10. 116. 126.]  
378 cord_individual_obj[indivial_i, :] = [ 4. 9. 106. 115.]  
379 cord_individual_obj[indivial_i, :] = [ 5. 10. 118. 128.]  
380 cord_individual_obj[indivial_i, :] = [ 6. 11. 97. 108.]  
381 cord_individual_obj[indivial_i, :] = [ 7. 10. 133. 143.]  
382 cord_individual_obj[indivial_i, :] = [ 8. 11. 170. 181.]  
383 cord_individual_obj[indivial_i, :] = [ 9. 8. 155. 163.]  
384 cord_individual_obj[indivial_i, :] = [ 10. 12. 151. 163.]  
385 cord_individual_obj[indivial_i, :] = [ 11. 11. 116. 127.]  
386 cord_individual_obj[indivial_i, :] = [ 12. 10. 73. 83.]  
387 cord_individual_obj[indivial_i, :] = [ 13. 10. 100. 110.]  
388 cord_individual_obj[indivial_i, :] = [ 14. 10. 146. 156.]  
389 cord_individual_obj[indivial_i, :] = [ 15. 11. 119. 130.]  
390 cord_individual_obj[indivial_i, :] = [ 16. 10. 141. 151.]  
391 cord_individual_obj[indivial_i, :] = [ 17. 10. 139. 149.]  
392 cord_individual_obj[indivial_i, :] = [ 18. 9. 116. 125.]  
393 cord_individual_obj[indivial_i, :] = [ 19. 10. 179. 189.]  
394 cord_individual_obj[indivial_i, :] = [ 20. 12. 196. 208.]  
395 cord_individual_obj[indivial_i, :] = [ 21. 9. 153. 162.]  
396 cord_individual_obj[indivial_i, :] = [ 22. 11. 122. 133.]  
397 cord_individual_obj[indivial_i, :] = [ 23. 10. 165. 175.]  
398 cord_individual_obj[indivial_i, :] = [ 24. 10. 151. 161.]  
399  
400 min(cord_individual_obj[:, 3]) = 83.0  
401 histol_G_best_iter[iter, 3] = 83.0  
402 Begin iteration:  
403  
404 iter = 12  
405 cord_individual_obj[indivial_i, :] = [ 0. 11. 130. 141.]  
406 cord_individual_obj[indivial_i, :] = [ 1. 10. 131. 141.]  
407 cord_individual_obj[indivial_i, :] = [ 2. 11. 146. 157.]  
408 cord_individual_obj[indivial_i, :] = [ 3. 11. 133. 144.]  
409 cord_individual_obj[indivial_i, :] = [ 4. 10. 181. 191.]  
410 cord_individual_obj[indivial_i, :] = [ 5. 8. 83. 91.]  
411 cord_individual_obj[indivial_i, :] = [ 6. 9. 100. 109.]  
412 cord_individual_obj[indivial_i, :] = [ 7. 9. 142. 151.]  
413 cord_individual_obj[indivial_i, :] = [ 8. 11. 150. 161.]  
414 cord_individual_obj[indivial_i, :] = [ 9. 9. 175. 184.]  
415 cord_individual_obj[indivial_i, :] = [ 10. 10. 150. 160.]
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416 cord_individual_obj[indivial_i,:] = [ 11. 9. 99. 108.]
417 cord_individual_obj[indivial_i,:] = [ 12. 9. 170. 179.]
418 cord_individual_obj[indivial_i,:] = [ 13. 10. 112. 122.]
419 cord_individual_obj[indivial_i,:] = [14. 10. 80. 90.]
420 cord_individual_obj[indivial_i,:] = [ 15. 14. 140. 154.]
421 cord_individual_obj[indivial_i,:] = [ 16. 10. 112. 122.]
422 cord_individual_obj[indivial_i,:] = [ 17. 10. 131. 141.]
423 cord_individual_obj[indivial_i,:] = [ 18. 10. 147. 157.]
424 cord_individual_obj[indivial_i,:] = [ 19. 11. 108. 119.]
425 cord_individual_obj[indivial_i,:] = [20. 10. 73. 83.]
426 cord_individual_obj[indivial_i,:] = [ 21. 9. 196. 205.]
427 cord_individual_obj[indivial_i,:] = [ 22. 13. 168. 181.]
428 cord_individual_obj[indivial_i,:] = [ 23. 12. 98. 110.]
429 cord_individual_obj[indivial_i,:] = [ 24. 10. 113. 123.]
430
431 min(cord_individual_obj[:,3]) = 83.0
432 histol_G_best_iter[iter,3] = 83.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [ 0. 9. 151. 160.]
437 cord_individual_obj[indivial_i,:] = [ 1. 10. 121. 131.]
438 cord_individual_obj[indivial_i,:] = [ 2. 12. 137. 149.]
439 cord_individual_obj[indivial_i,:] = [ 3. 10. 185. 195.]
440 cord_individual_obj[indivial_i,:] = [ 4. 11. 149. 160.]
441 cord_individual_obj[indivial_i,:] = [ 5. 9. 130. 139.]
442 cord_individual_obj[indivial_i,:] = [ 6. 11. 94. 105.]
443 cord_individual_obj[indivial_i,:] = [ 7. 9. 103. 112.]
444 cord_individual_obj[indivial_i,:] = [ 8. 9. 160. 169.]
445 cord_individual_obj[indivial_i,:] = [ 9. 10. 132. 142.]
446 cord_individual_obj[indivial_i,:] = [10. 12. 93. 105.]
447 cord_individual_obj[indivial_i,:] = [11. 13. 104. 117.]
448 cord_individual_obj[indivial_i,:] = [12. 12. 110. 122.]
449 cord_individual_obj[indivial_i,:] = [13. 10. 135. 145.]
450 cord_individual_obj[indivial_i,:] = [14. 9. 121. 130.]
451 cord_individual_obj[indivial_i,:] = [15. 12. 120. 132.]
452 cord_individual_obj[indivial_i,:] = [16. 9. 134. 143.]
453 cord_individual_obj[indivial_i,:] = [17. 11. 92. 103.]
454 cord_individual_obj[indivial_i,:] = [18. 10. 100. 110.]
455 cord_individual_obj[indivial_i,:] = [19. 9. 130. 139.]
456 cord_individual_obj[indivial_i,:] = [20. 11. 111. 122.]
457 cord_individual_obj[indivial_i,:] = [21. 10. 73. 83.]
458 cord_individual_obj[indivial_i,:] = [22. 12. 106. 118.]
459 cord_individual_obj[indivial_i,:] = [23. 9. 100. 109.]
460 cord_individual_obj[indivial_i,:] = [24. 10. 161. 171.]
461
462 min(cord_individual_obj[:,3]) = 83.0
463 histol_G_best_iter[iter,3] = 83.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [ 0. 9. 143. 152.]
468 cord_individual_obj[indivial_i,:] = [ 1. 10. 151. 161.]
469 cord_individual_obj[indivial_i,:] = [ 2. 10. 89. 99.]
470 cord_individual_obj[indivial_i,:] = [ 3. 10. 73. 83.]
471 cord_individual_obj[indivial_i,:] = [ 4. 11. 107. 118.]
472 cord_individual_obj[indivial_i,:] = [ 5. 9. 132. 141.]
473 cord_individual_obj[indivial_i,:] = [ 6. 12. 132. 144.]
474 cord_individual_obj[indivial_i,:] = [ 7. 12. 168. 180.]
475 cord_individual_obj[indivial_i,:] = [ 8. 11. 135. 146.]
476 cord_individual_obj[indivial_i,:] = [ 9. 9. 114. 123.]
477 cord_individual_obj[indivial_i,:] = [10. 12. 115. 127.]
478 cord_individual_obj[indivial_i,:] = [11. 11. 95. 106.]
479 cord_individual_obj[indivial_i,:] = [12. 11. 147. 158.]
480 cord_individual_obj[indivial_i,:] = [13. 10. 216. 226.]
481 cord_individual_obj[indivial_i,:] = [14. 11. 153. 164.]
482 cord_individual_obj[indivial_i,:] = [15. 13. 99. 112.]
483 cord_individual_obj[indivial_i,:] = [16. 10. 140. 150.]
484 cord_individual_obj[indivial_i,:] = [17. 10. 164. 174.]
485 cord_individual_obj[indivial_i,:] = [18. 11. 147. 158.]
486 cord_individual_obj[indivial_i,:] = [19. 10. 97. 107.]
487 cord_individual_obj[indivial_i,:] = [20. 9. 137. 146.]
488 cord_individual_obj[indivial_i,:] = [21. 10. 172. 182.]
489 cord_individual_obj[indivial_i,:] = [22. 12. 166. 178.]
490 cord_individual_obj[indivial_i,:] = [23. 9. 111. 120.]
491 cord_individual_obj[indivial_i,:] = [24. 11. 129. 140.]
492
493 min(cord_individual_obj[:,3]) = 83.0
494 histol_G_best_iter[iter,3] = 83.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [ 0. 11. 134. 145.]
499 cord_individual_obj[indivial_i,:] = [ 1. 10. 90. 100.]

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500 cord_individual_obj[indivial_i, :] = [ 2. 10. 152. 162.]
501 cord_individual_obj[indivial_i, :] = [ 3. 10. 149. 159.]
502 cord_individual_obj[indivial_i, :] = [ 4. 11. 103. 114.]
503 cord_individual_obj[indivial_i, :] = [ 5. 9. 100. 109.]
504 cord_individual_obj[indivial_i, :] = [ 6. 10. 111. 121.]
505 cord_individual_obj[indivial_i, :] = [ 7. 10. 182. 192.]
506 cord_individual_obj[indivial_i, :] = [ 8. 12. 146. 158.]
507 cord_individual_obj[indivial_i, :] = [ 9. 10. 148. 158.]
508 cord_individual_obj[indivial_i, :] = [ 10. 13. 207. 220.]
509 cord_individual_obj[indivial_i, :] = [ 11. 9. 98. 107.]
510 cord_individual_obj[indivial_i, :] = [ 12. 10. 149. 159.]
511 cord_individual_obj[indivial_i, :] = [ 13. 10. 73. 83.]
512 cord_individual_obj[indivial_i, :] = [ 14. 9. 149. 158.]
513 cord_individual_obj[indivial_i, :] = [ 15. 12. 145. 157.]
514 cord_individual_obj[indivial_i, :] = [ 16. 11. 106. 117.]
515 cord_individual_obj[indivial_i, :] = [ 17. 12. 122. 134.]
516 cord_individual_obj[indivial_i, :] = [ 18. 10. 126. 136.]
517 cord_individual_obj[indivial_i, :] = [ 19. 12. 156. 168.]
518 cord_individual_obj[indivial_i, :] = [ 20. 9. 134. 143.]
519 cord_individual_obj[indivial_i, :] = [ 21. 9. 135. 144.]
520 cord_individual_obj[indivial_i, :] = [ 22. 14. 135. 149.]
521 cord_individual_obj[indivial_i, :] = [ 23. 11. 121. 132.]
522 cord_individual_obj[indivial_i, :] = [ 24. 10. 127. 137.]
523
524 min(cord_individual_obj[:, 3]) = 83.0
525 histol_G_best_iter[iter, 3] = 83.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i, :] = [ 0. 10. 145. 155.]
530 cord_individual_obj[indivial_i, :] = [ 1. 11. 118. 129.]
531 cord_individual_obj[indivial_i, :] = [ 2. 10. 137. 147.]
532 cord_individual_obj[indivial_i, :] = [ 3. 10. 149. 159.]
533 cord_individual_obj[indivial_i, :] = [ 4. 10. 122. 132.]
534 cord_individual_obj[indivial_i, :] = [ 5. 9. 133. 142.]
535 cord_individual_obj[indivial_i, :] = [ 6. 9. 141. 150.]
536 cord_individual_obj[indivial_i, :] = [ 7. 10. 127. 137.]
537 cord_individual_obj[indivial_i, :] = [ 8. 13. 155. 168.]
538 cord_individual_obj[indivial_i, :] = [ 9. 10. 103. 113.]
539 cord_individual_obj[indivial_i, :] = [ 10. 10. 73. 83.]
540 cord_individual_obj[indivial_i, :] = [ 11. 11. 115. 126.]
541 cord_individual_obj[indivial_i, :] = [ 12. 9. 163. 172.]
542 cord_individual_obj[indivial_i, :] = [ 13. 10. 82. 92.]
543 cord_individual_obj[indivial_i, :] = [ 14. 8. 207. 215.]
544 cord_individual_obj[indivial_i, :] = [ 15. 13. 135. 148.]
545 cord_individual_obj[indivial_i, :] = [ 16. 13. 155. 168.]
546 cord_individual_obj[indivial_i, :] = [ 17. 9. 175. 184.]
547 cord_individual_obj[indivial_i, :] = [ 18. 10. 121. 131.]
548 cord_individual_obj[indivial_i, :] = [ 19. 10. 104. 114.]
549 cord_individual_obj[indivial_i, :] = [ 20. 11. 168. 179.]
550 cord_individual_obj[indivial_i, :] = [ 21. 10. 178. 188.]
551 cord_individual_obj[indivial_i, :] = [ 22. 11. 142. 153.]
552 cord_individual_obj[indivial_i, :] = [ 23. 10. 160. 170.]
553 cord_individual_obj[indivial_i, :] = [ 24. 9. 135. 144.]
554
555 min(cord_individual_obj[:, 3]) = 83.0
556 histol_G_best_iter[iter, 3] = 83.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i, :] = [ 0. 10. 113. 123.]
561 cord_individual_obj[indivial_i, :] = [ 1. 9. 125. 134.]
562 cord_individual_obj[indivial_i, :] = [ 2. 9. 156. 165.]
563 cord_individual_obj[indivial_i, :] = [ 3. 10. 163. 173.]
564 cord_individual_obj[indivial_i, :] = [ 4. 9. 125. 134.]
565 cord_individual_obj[indivial_i, :] = [ 5. 10. 95. 105.]
566 cord_individual_obj[indivial_i, :] = [ 6. 12. 144. 156.]
567 cord_individual_obj[indivial_i, :] = [ 7. 9. 99. 108.]
568 cord_individual_obj[indivial_i, :] = [ 8. 10. 140. 150.]
569 cord_individual_obj[indivial_i, :] = [ 9. 9. 150. 159.]
570 cord_individual_obj[indivial_i, :] = [ 10. 12. 100. 112.]
571 cord_individual_obj[indivial_i, :] = [ 11. 11. 86. 97.]
572 cord_individual_obj[indivial_i, :] = [ 12. 11. 111. 122.]
573 cord_individual_obj[indivial_i, :] = [ 13. 8. 142. 150.]
574 cord_individual_obj[indivial_i, :] = [ 14. 10. 73. 83.]
575 cord_individual_obj[indivial_i, :] = [ 15. 11. 92. 103.]
576 cord_individual_obj[indivial_i, :] = [ 16. 11. 116. 127.]
577 cord_individual_obj[indivial_i, :] = [ 17. 10. 100. 110.]
578 cord_individual_obj[indivial_i, :] = [ 18. 12. 115. 127.]
579 cord_individual_obj[indivial_i, :] = [ 19. 9. 150. 159.]
580 cord_individual_obj[indivial_i, :] = [ 20. 9. 126. 135.]
581 cord_individual_obj[indivial_i, :] = [ 21. 10. 158. 168.]
582 cord_individual_obj[indivial_i, :] = [ 22. 11. 126. 137.]
583 cord_individual_obj[indivial_i, :] = [ 23. 10. 154. 164.]

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584     cord_individual_obj[indivial_i, :] = [ 24. 10. 124. 134.]
585
586     min(cord_individual_obj[:, 3]) = 83.0
587     historl_G_best_iter[iter, 3] = 83.0
588 Begin iteration:
589
590 iter = 18
591     cord_individual_obj[indivial_i, :] = [ 0. 8. 98. 106.]
592     cord_individual_obj[indivial_i, :] = [ 1. 12. 131. 143.]
593     cord_individual_obj[indivial_i, :] = [ 2. 13. 99. 112.]
594     cord_individual_obj[indivial_i, :] = [ 3. 10. 73. 83.]
595     cord_individual_obj[indivial_i, :] = [ 4. 9. 136. 145.]
596     cord_individual_obj[indivial_i, :] = [ 5. 8. 103. 111.]
597     cord_individual_obj[indivial_i, :] = [ 6. 9. 139. 148.]
598     cord_individual_obj[indivial_i, :] = [ 7. 11. 129. 140.]
599     cord_individual_obj[indivial_i, :] = [ 8. 10. 114. 124.]
600     cord_individual_obj[indivial_i, :] = [ 9. 11. 90. 101.]
601     cord_individual_obj[indivial_i, :] = [ 10. 9. 161. 170.]
602     cord_individual_obj[indivial_i, :] = [ 11. 9. 136. 145.]
603     cord_individual_obj[indivial_i, :] = [ 12. 9. 191. 200.]
604     cord_individual_obj[indivial_i, :] = [ 13. 10. 142. 152.]
605     cord_individual_obj[indivial_i, :] = [ 14. 9. 231. 240.]
606     cord_individual_obj[indivial_i, :] = [ 15. 12. 94. 106.]
607     cord_individual_obj[indivial_i, :] = [ 16. 10. 103. 113.]
608     cord_individual_obj[indivial_i, :] = [ 17. 11. 115. 126.]
609     cord_individual_obj[indivial_i, :] = [ 18. 11. 125. 136.]
610     cord_individual_obj[indivial_i, :] = [ 19. 11. 115. 126.]
611     cord_individual_obj[indivial_i, :] = [ 20. 12. 127. 139.]
612     cord_individual_obj[indivial_i, :] = [ 21. 9. 131. 140.]
613     cord_individual_obj[indivial_i, :] = [ 22. 12. 121. 133.]
614     cord_individual_obj[indivial_i, :] = [ 23. 9. 111. 120.]
615     cord_individual_obj[indivial_i, :] = [ 24. 11. 160. 171.]
616
617     min(cord_individual_obj[:, 3]) = 83.0
618     historl_G_best_iter[iter, 3] = 83.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0. 10. 133. 143.]
623     cord_individual_obj[indivial_i, :] = [ 1. 11. 118. 129.]
624     cord_individual_obj[indivial_i, :] = [ 2. 10. 146. 156.]
625     cord_individual_obj[indivial_i, :] = [ 3. 10. 150. 160.]
626     cord_individual_obj[indivial_i, :] = [ 4. 10. 150. 160.]
627     cord_individual_obj[indivial_i, :] = [ 5. 9. 131. 140.]
628     cord_individual_obj[indivial_i, :] = [ 6. 10. 117. 127.]
629     cord_individual_obj[indivial_i, :] = [ 7. 10. 137. 147.]
630     cord_individual_obj[indivial_i, :] = [ 8. 11. 180. 191.]
631     cord_individual_obj[indivial_i, :] = [ 9. 11. 95. 106.]
632     cord_individual_obj[indivial_i, :] = [ 10. 10. 139. 149.]
633     cord_individual_obj[indivial_i, :] = [ 11. 9. 112. 121.]
634     cord_individual_obj[indivial_i, :] = [ 12. 10. 125. 135.]
635     cord_individual_obj[indivial_i, :] = [ 13. 10. 155. 165.]
636     cord_individual_obj[indivial_i, :] = [ 14. 10. 73. 83.]
637     cord_individual_obj[indivial_i, :] = [ 15. 12. 110. 122.]
638     cord_individual_obj[indivial_i, :] = [ 16. 10. 129. 139.]
639     cord_individual_obj[indivial_i, :] = [ 17. 11. 87. 98.]
640     cord_individual_obj[indivial_i, :] = [ 18. 12. 132. 144.]
641     cord_individual_obj[indivial_i, :] = [ 19. 10. 147. 157.]
642     cord_individual_obj[indivial_i, :] = [ 20. 11. 181. 192.]
643     cord_individual_obj[indivial_i, :] = [ 21. 9. 134. 143.]
644     cord_individual_obj[indivial_i, :] = [ 22. 14. 120. 134.]
645     cord_individual_obj[indivial_i, :] = [ 23. 9. 144. 153.]
646     cord_individual_obj[indivial_i, :] = [ 24. 11. 135. 146.]
647
648     min(cord_individual_obj[:, 3]) = 83.0
649     historl_G_best_iter[iter, 3] = 83.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0. 10. 126. 136.]
654     cord_individual_obj[indivial_i, :] = [ 1. 9. 147. 156.]
655     cord_individual_obj[indivial_i, :] = [ 2. 9. 166. 175.]
656     cord_individual_obj[indivial_i, :] = [ 3. 11. 186. 197.]
657     cord_individual_obj[indivial_i, :] = [ 4. 11. 143. 154.]
658     cord_individual_obj[indivial_i, :] = [ 5. 10. 98. 108.]
659     cord_individual_obj[indivial_i, :] = [ 6. 11. 121. 132.]
660     cord_individual_obj[indivial_i, :] = [ 7. 10. 111. 121.]
661     cord_individual_obj[indivial_i, :] = [ 8. 11. 147. 158.]
662     cord_individual_obj[indivial_i, :] = [ 9. 12. 138. 150.]
663     cord_individual_obj[indivial_i, :] = [ 10. 11. 133. 144.]
664     cord_individual_obj[indivial_i, :] = [ 11. 12. 125. 137.]
665     cord_individual_obj[indivial_i, :] = [ 12. 9. 193. 202.]
666     cord_individual_obj[indivial_i, :] = [ 13. 8. 132. 140.]
667     cord_individual_obj[indivial_i, :] = [ 14. 8. 137. 145.]

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668 cord_individual_obj[indivial_i,:] = [ 15. 12. 124. 136.]
669 cord_individual_obj[indivial_i,:] = [ 16. 11. 142. 153.]
670 cord_individual_obj[indivial_i,:] = [ 17. 12. 212. 224.]
671 cord_individual_obj[indivial_i,:] = [ 18. 12. 131. 143.]
672 cord_individual_obj[indivial_i,:] = [ 19. 9. 136. 145.]
673 cord_individual_obj[indivial_i,:] = [20. 10. 73. 83.]
674 cord_individual_obj[indivial_i,:] = [21. 9. 148. 157.]
675 cord_individual_obj[indivial_i,:] = [22. 11. 147. 158.]
676 cord_individual_obj[indivial_i,:] = [23. 11. 103. 114.]
677 cord_individual_obj[indivial_i,:] = [24. 9. 193. 202.]
678
679 min(cord_individual_obj[:, 3]) = 83.0
680 historl_G_best_iter[iter, 3] = 83.0
681 Iteration calculate over
682
683
684
685
686 All item are in Bin and:
687 Bin area = 1080
688 Real_area = 228.0
689 Proportion_of_area = 0.2111111111111111
690 BEST_CHROM =
691     berth: [ 3. 15. 22.5 7.5 2.5 9. 3. 17. 9. 25. 18. 8.5 21. 3.5
692 12. 2.5 22.5 22.5 14.5]
693     time: [5. 5. 0. 2. 7. 0. 6. 8. 7. 4. 4. 5. 2. 0. 3. 2. 6. 3. 0.]
694     num_QC: [4. 4. 5. 2. 2. 4. 4. 3. 2. 2. 4. 3. 3. 4. 4. 5. 4. 3. 3.]
695 Objective function values and some other indicators:
696 Obj0 = 10.00      Obj1 = 73.00      Obj0 + Obj1 = 83.00
697 Total movement of crane: 4.00
698 Total waiting time in berth position: 69.00
699 Total index of q during berthing: 962.00
700 Specific arrangement for each vessel:
701 V_id: 0           li: 6.0           xi: 3.0           bow of i: 0.0           tail of i: 6.0           gama_i0: 5.0           gama_i1: 5.0
    .               gama_i1 + 1: 6.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
60.0             work load gap_i: 0
702 V_id: 1           li: 8.0           xi: 15.0          bow of i: 11.0           tail of i: 19.0           gama_i0: 5.0           gama_i1: 5
    .               gama_i1 + 1: 6.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
    .load_i: 60.0
703 V_id: 2           li: 9.0           xi: 22.5          bow of i: 18.0           tail of i: 27.0           gama_i0: 0.0           gama_i1: 1
    .               gama_i1 + 1: 2.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
    .load_i: 160.0
704 V_id: 3           li: 5.0           xi: 7.5            bow of i: 5.0           tail of i: 10.0           gama_i0: 2.0           gama_i1: 4.0
    .               gama_i1 + 1: 5.0       gama_i1 - gama_i0: 2.0   duration_time_i: 3.0
    100.0           work load gap_i: 0
705 V_id: 4           li: 5.0           xi: 2.5            bow of i: 0.0           tail of i: 5.0           gama_i0: 7.0           gama_i1: 9.0
    .               gama_i1 + 1: 10.0      gama_i1 - gama_i0: 2.0   duration_time_i: 3.0
    .load_i: 120.0
706 V_id: 5           li: 4.0           xi: 9.0            bow of i: 7.0           tail of i: 11.0           gama_i0: 0.0           gama_i1: 1
    .               gama_i1 + 1: 2.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
    100.0           work load gap_i: 0
707 V_id: 6           li: 6.0           xi: 3.0            bow of i: 0.0           tail of i: 6.0           gama_i0: 6.0           gama_i1: 6.0
    .               gama_i1 + 1: 7.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
    60.0             work load gap_i: 0
708 V_id: 7           li: 8.0           xi: 17.0          bow of i: 13.0           tail of i: 21.0           gama_i0: 8.0           gama_i1: 9
    .               gama_i1 + 1: 10.0      gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
    .load_i: 80.0
709 V_id: 8           li: 8.0           xi: 9.0            bow of i: 5.0           tail of i: 13.0           gama_i0: 7.0           gama_i1: 10.
    0               gama_i1 + 1: 11.0      gama_i1 - gama_i0: 3.0   duration_time_i: 4.0
    .load_i: 140.0
710 V_id: 9           li: 6.0           xi: 25.0          bow of i: 22.0           tail of i: 28.0           gama_i0: 4.0           gama_i1: 5
    .               gama_i1 + 1: 6.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
    .load_i: 60.0
711 V_id: 10          li: 8.0           xi: 18.0          bow of i: 14.0           tail of i: 22.0           gama_i0: 4.0           gama_i1: 1
    : 4.0             gama_i1 + 1: 5.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
    .load_i: 80.0
712 V_id: 11          li: 5.0           xi: 8.5            bow of i: 6.0           tail of i: 11.0           gama_i0: 5.0           gama_i1: 5
    .               gama_i1 + 1: 6.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
    .load_i: 60.0
713 V_id: 12          li: 6.0           xi: 21.0          bow of i: 18.0           tail of i: 24.0           gama_i0: 2.0           gama_i1: 1
    : 2.0             gama_i1 + 1: 3.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
    .load_i: 60.0
714 V_id: 13          li: 7.0           xi: 3.5            bow of i: 0.0           tail of i: 7.0           gama_i0: 0.0           gama_i1: 1
    .               gama_i1 + 1: 2.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
    140.0           work load gap_i: 0
715 V_id: 14          li: 4.0           xi: 12.0          bow of i: 10.0           tail of i: 14.0           gama_i0: 3.0           gama_i1: 1
    : 4.0             gama_i1 + 1: 5.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
    .load_i: 100.0
716 V_id: 15          li: 5.0           xi: 2.5            bow of i: 0.0           tail of i: 5.0           gama_i0: 2.0           gama_i1: 3
    .               gama_i1 + 1: 4.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
    160.0           work load gap_i: 0
717 V_id: 16          li: 7.0           xi: 22.5          bow of i: 19.0           tail of i: 26.0           gama_i0: 6.0           gama_i1: 1
    : 7.0             gama_i1 + 1: 8.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
    .load_i: 160.0

```

unknown

718	V_id: 17 : 3.0 load_i: 60.0	li: 9.0 gama_i1 + 1: 4.0 work load gap_i: 0	xi: 22.5 gama_i1 - gama_i0: 0.0	bow of i: 18.0 gama_i1 - gama_i0: 2.0	tail of i: 27.0 duration_time_i: 1.0	gama_i0: 3.0 demand_i: 60.0	gama_i1 work
719	V_id: 18 : 2.0 load_i: 160.0	li: 7.0 gama_i1 + 1: 3.0 work load gap_i: 0	xi: 14.5 gama_i1 - gama_i0: 2.0	bow of i: 11.0 gama_i1 - gama_i0: 2.0	tail of i: 18.0 duration_time_i: 3.0	gama_i0: 0.0 demand_i: 160.0	gama_i1 work
720	Algorithm finished and the total CPU time: 530 s						
721	End						
722							
723							