

unknown

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80 cord_individual_obj[indivial_i,:] = [ 16. 11. 132. 143.]
81 cord_individual_obj[indivial_i,:] = [ 17. 7. 154. 161.]
82 cord_individual_obj[indivial_i,:] = [ 18. 8. 169. 177.]
83 cord_individual_obj[indivial_i,:] = [ 19. 7. 184. 191.]
84 cord_individual_obj[indivial_i,:] = [ 20. 10. 128. 138.]
85 cord_individual_obj[indivial_i,:] = [ 21. 10. 158. 168.]
86 cord_individual_obj[indivial_i,:] = [ 22. 9. 158. 167.]
87 cord_individual_obj[indivial_i,:] = [ 23. 9. 175. 184.]
88 cord_individual_obj[indivial_i,:] = [ 24. 8. 90. 98.]
89
90 min(cord_individual_obj[:,3]) = 91.0
91 historl_G_best_iter[iter, 3] = 91.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 9. 118. 127.]
96 cord_individual_obj[indivial_i,:] = [ 1. 7. 153. 160.]
97 cord_individual_obj[indivial_i,:] = [ 2. 6. 134. 140.]
98 cord_individual_obj[indivial_i,:] = [ 3. 8. 89. 97.]
99 cord_individual_obj[indivial_i,:] = [ 4. 9. 163. 172.]
100 cord_individual_obj[indivial_i,:] = [ 5. 9. 160. 169.]
101 cord_individual_obj[indivial_i,:] = [ 6. 8. 133. 141.]
102 cord_individual_obj[indivial_i,:] = [ 7. 8. 94. 102.]
103 cord_individual_obj[indivial_i,:] = [ 8. 10. 91. 101.]
104 cord_individual_obj[indivial_i,:] = [ 9. 8. 72. 80.]
105 cord_individual_obj[indivial_i,:] = [10. 6. 85. 91.]
106 cord_individual_obj[indivial_i,:] = [11. 7. 105. 112.]
107 cord_individual_obj[indivial_i,:] = [12. 10. 118. 128.]
108 cord_individual_obj[indivial_i,:] = [13. 10. 115. 125.]
109 cord_individual_obj[indivial_i,:] = [14. 10. 182. 192.]
110 cord_individual_obj[indivial_i,:] = [15. 10. 86. 96.]
111 cord_individual_obj[indivial_i,:] = [16. 9. 155. 164.]
112 cord_individual_obj[indivial_i,:] = [17. 8. 148. 156.]
113 cord_individual_obj[indivial_i,:] = [18. 10. 84. 94.]
114 cord_individual_obj[indivial_i,:] = [19. 9. 119. 128.]
115 cord_individual_obj[indivial_i,:] = [20. 10. 132. 142.]
116 cord_individual_obj[indivial_i,:] = [21. 8. 117. 125.]
117 cord_individual_obj[indivial_i,:] = [22. 7. 133. 140.]
118 cord_individual_obj[indivial_i,:] = [23. 9. 149. 158.]
119 cord_individual_obj[indivial_i,:] = [24. 9. 216. 225.]
120
121 min(cord_individual_obj[:,3]) = 80.0
122 historl_G_best_iter[iter, 3] = 80.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 9. 194. 203.]
127 cord_individual_obj[indivial_i,:] = [ 1. 8. 94. 102.]
128 cord_individual_obj[indivial_i,:] = [ 2. 9. 117. 126.]
129 cord_individual_obj[indivial_i,:] = [ 3. 11. 183. 194.]
130 cord_individual_obj[indivial_i,:] = [ 4. 10. 102. 112.]
131 cord_individual_obj[indivial_i,:] = [ 5. 9. 190. 199.]
132 cord_individual_obj[indivial_i,:] = [ 6. 10. 172. 182.]
133 cord_individual_obj[indivial_i,:] = [ 7. 8. 106. 114.]
134 cord_individual_obj[indivial_i,:] = [ 8. 7. 136. 143.]
135 cord_individual_obj[indivial_i,:] = [ 9. 7. 120. 127.]
136 cord_individual_obj[indivial_i,:] = [10. 11. 156. 167.]
137 cord_individual_obj[indivial_i,:] = [11. 10. 134. 144.]
138 cord_individual_obj[indivial_i,:] = [12. 7. 121. 128.]
139 cord_individual_obj[indivial_i,:] = [13. 7. 163. 170.]
140 cord_individual_obj[indivial_i,:] = [14. 10. 111. 121.]
141 cord_individual_obj[indivial_i,:] = [15. 8. 115. 123.]
142 cord_individual_obj[indivial_i,:] = [16. 8. 89. 97.]
143 cord_individual_obj[indivial_i,:] = [17. 9. 167. 176.]
144 cord_individual_obj[indivial_i,:] = [18. 8. 126. 134.]
145 cord_individual_obj[indivial_i,:] = [19. 10. 154. 164.]
146 cord_individual_obj[indivial_i,:] = [20. 8. 88. 96.]
147 cord_individual_obj[indivial_i,:] = [21. 9. 106. 115.]
148 cord_individual_obj[indivial_i,:] = [22. 9. 122. 131.]
149 cord_individual_obj[indivial_i,:] = [23. 7. 187. 194.]
150 cord_individual_obj[indivial_i,:] = [24. 8. 72. 80.]
151
152 min(cord_individual_obj[:,3]) = 80.0
153 historl_G_best_iter[iter, 3] = 80.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 8. 72. 80.]
158 cord_individual_obj[indivial_i,:] = [ 1. 7. 126. 133.]
159 cord_individual_obj[indivial_i,:] = [ 2. 9. 185. 194.]
160 cord_individual_obj[indivial_i,:] = [ 3. 10. 100. 110.]
161 cord_individual_obj[indivial_i,:] = [ 4. 11. 200. 211.]
162 cord_individual_obj[indivial_i,:] = [ 5. 11. 128. 139.]
163 cord_individual_obj[indivial_i,:] = [ 6. 8. 105. 113.]

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164 cord_individual_obj[indivial_i,:] = [ 7. 8. 128. 136.]
165 cord_individual_obj[indivial_i,:] = [ 8. 8. 95. 103.]
166 cord_individual_obj[indivial_i,:] = [ 9. 8. 100. 108.]
167 cord_individual_obj[indivial_i,:] = [ 10. 8. 160. 168.]
168 cord_individual_obj[indivial_i,:] = [ 11. 9. 147. 156.]
169 cord_individual_obj[indivial_i,:] = [ 12. 7. 147. 154.]
170 cord_individual_obj[indivial_i,:] = [ 13. 7. 238. 245.]
171 cord_individual_obj[indivial_i,:] = [ 14. 6. 168. 174.]
172 cord_individual_obj[indivial_i,:] = [ 15. 9. 81. 90.]
173 cord_individual_obj[indivial_i,:] = [ 16. 9. 145. 154.]
174 cord_individual_obj[indivial_i,:] = [ 17. 8. 179. 187.]
175 cord_individual_obj[indivial_i,:] = [ 18. 10. 164. 174.]
176 cord_individual_obj[indivial_i,:] = [ 19. 7. 149. 156.]
177 cord_individual_obj[indivial_i,:] = [ 20. 10. 107. 117.]
178 cord_individual_obj[indivial_i,:] = [ 21. 7. 139. 146.]
179 cord_individual_obj[indivial_i,:] = [ 22. 8. 260. 268.]
180 cord_individual_obj[indivial_i,:] = [ 23. 9. 150. 159.]
181 cord_individual_obj[indivial_i,:] = [ 24. 11. 181. 192.]
182
183 min(cord_individual_obj[:,3]) = 80.0
184 historl_G_best_iter[iter,3] = 80.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i,:] = [ 0. 9. 181. 190.]
189 cord_individual_obj[indivial_i,:] = [ 1. 8. 87. 95.]
190 cord_individual_obj[indivial_i,:] = [ 2. 8. 162. 170.]
191 cord_individual_obj[indivial_i,:] = [ 3. 11. 83. 94.]
192 cord_individual_obj[indivial_i,:] = [ 4. 10. 122. 132.]
193 cord_individual_obj[indivial_i,:] = [ 5. 8. 111. 119.]
194 cord_individual_obj[indivial_i,:] = [ 6. 9. 136. 145.]
195 cord_individual_obj[indivial_i,:] = [ 7. 8. 160. 168.]
196 cord_individual_obj[indivial_i,:] = [ 8. 8. 119. 127.]
197 cord_individual_obj[indivial_i,:] = [ 9. 7. 117. 124.]
198 cord_individual_obj[indivial_i,:] = [ 10. 9. 142. 151.]
199 cord_individual_obj[indivial_i,:] = [ 11. 10. 194. 204.]
200 cord_individual_obj[indivial_i,:] = [ 12. 9. 213. 222.]
201 cord_individual_obj[indivial_i,:] = [ 13. 8. 167. 175.]
202 cord_individual_obj[indivial_i,:] = [ 14. 7. 82. 89.]
203 cord_individual_obj[indivial_i,:] = [ 15. 7. 113. 120.]
204 cord_individual_obj[indivial_i,:] = [ 16. 7. 104. 111.]
205 cord_individual_obj[indivial_i,:] = [ 17. 7. 102. 109.]
206 cord_individual_obj[indivial_i,:] = [ 18. 8. 108. 116.]
207 cord_individual_obj[indivial_i,:] = [ 19. 9. 129. 138.]
208 cord_individual_obj[indivial_i,:] = [ 20. 11. 128. 139.]
209 cord_individual_obj[indivial_i,:] = [ 21. 10. 201. 211.]
210 cord_individual_obj[indivial_i,:] = [ 22. 8. 72. 80.]
211 cord_individual_obj[indivial_i,:] = [ 23. 7. 145. 152.]
212 cord_individual_obj[indivial_i,:] = [ 24. 8. 101. 109.]
213
214 min(cord_individual_obj[:,3]) = 80.0
215 historl_G_best_iter[iter,3] = 80.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i,:] = [ 0. 11. 136. 147.]
220 cord_individual_obj[indivial_i,:] = [ 1. 8. 128. 136.]
221 cord_individual_obj[indivial_i,:] = [ 2. 8. 96. 104.]
222 cord_individual_obj[indivial_i,:] = [ 3. 10. 109. 119.]
223 cord_individual_obj[indivial_i,:] = [ 4. 12. 173. 185.]
224 cord_individual_obj[indivial_i,:] = [ 5. 11. 123. 134.]
225 cord_individual_obj[indivial_i,:] = [ 6. 9. 155. 164.]
226 cord_individual_obj[indivial_i,:] = [ 7. 7. 101. 108.]
227 cord_individual_obj[indivial_i,:] = [ 8. 8. 178. 186.]
228 cord_individual_obj[indivial_i,:] = [ 9. 9. 148. 157.]
229 cord_individual_obj[indivial_i,:] = [ 10. 7. 156. 163.]
230 cord_individual_obj[indivial_i,:] = [ 11. 9. 145. 154.]
231 cord_individual_obj[indivial_i,:] = [ 12. 8. 72. 80.]
232 cord_individual_obj[indivial_i,:] = [ 13. 9. 89. 98.]
233 cord_individual_obj[indivial_i,:] = [ 14. 7. 125. 132.]
234 cord_individual_obj[indivial_i,:] = [ 15. 8. 148. 156.]
235 cord_individual_obj[indivial_i,:] = [ 16. 10. 122. 132.]
236 cord_individual_obj[indivial_i,:] = [ 17. 7. 67. 74.]
237 cord_individual_obj[indivial_i,:] = [ 18. 8. 107. 115.]
238 cord_individual_obj[indivial_i,:] = [ 19. 10. 114. 124.]
239 cord_individual_obj[indivial_i,:] = [ 20. 10. 157. 167.]
240 cord_individual_obj[indivial_i,:] = [ 21. 8. 124. 132.]
241 cord_individual_obj[indivial_i,:] = [ 22. 10. 132. 142.]
242 cord_individual_obj[indivial_i,:] = [ 23. 10. 168. 178.]
243 cord_individual_obj[indivial_i,:] = [ 24. 12. 144. 156.]
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. 9. 115. 124.]
251 cord_individual_obj[indivial_i, :] = [ 1. 8. 190. 198.]
252 cord_individual_obj[indivial_i, :] = [ 2. 6. 135. 141.]
253 cord_individual_obj[indivial_i, :] = [ 3. 7. 121. 128.]
254 cord_individual_obj[indivial_i, :] = [ 4. 9. 155. 164.]
255 cord_individual_obj[indivial_i, :] = [ 5. 9. 145. 154.]
256 cord_individual_obj[indivial_i, :] = [ 6. 8. 115. 123.]
257 cord_individual_obj[indivial_i, :] = [ 7. 7. 160. 167.]
258 cord_individual_obj[indivial_i, :] = [ 8. 7. 67. 74.]
259 cord_individual_obj[indivial_i, :] = [ 9. 8. 136. 144.]
260 cord_individual_obj[indivial_i, :] = [ 10. 11. 154. 165.]
261 cord_individual_obj[indivial_i, :] = [ 11. 6. 162. 168.]
262 cord_individual_obj[indivial_i, :] = [ 12. 9. 145. 154.]
263 cord_individual_obj[indivial_i, :] = [ 13. 9. 104. 113.]
264 cord_individual_obj[indivial_i, :] = [ 14. 9. 125. 134.]
265 cord_individual_obj[indivial_i, :] = [ 15. 7. 76. 83.]
266 cord_individual_obj[indivial_i, :] = [ 16. 8. 114. 122.]
267 cord_individual_obj[indivial_i, :] = [ 17. 10. 159. 169.]
268 cord_individual_obj[indivial_i, :] = [ 18. 10. 92. 102.]
269 cord_individual_obj[indivial_i, :] = [ 19. 9. 120. 129.]
270 cord_individual_obj[indivial_i, :] = [ 20. 8. 120. 128.]
271 cord_individual_obj[indivial_i, :] = [ 21. 8. 193. 201.]
272 cord_individual_obj[indivial_i, :] = [ 22. 7. 102. 109.]
273 cord_individual_obj[indivial_i, :] = [ 23. 7. 127. 134.]
274 cord_individual_obj[indivial_i, :] = [ 24. 9. 170. 179.]
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. 8. 95. 103.]
282 cord_individual_obj[indivial_i, :] = [ 1. 8. 146. 154.]
283 cord_individual_obj[indivial_i, :] = [ 2. 9. 156. 165.]
284 cord_individual_obj[indivial_i, :] = [ 3. 8. 163. 171.]
285 cord_individual_obj[indivial_i, :] = [ 4. 9. 112. 121.]
286 cord_individual_obj[indivial_i, :] = [ 5. 7. 213. 220.]
287 cord_individual_obj[indivial_i, :] = [ 6. 10. 129. 139.]
288 cord_individual_obj[indivial_i, :] = [ 7. 7. 146. 153.]
289 cord_individual_obj[indivial_i, :] = [ 8. 8. 112. 120.]
290 cord_individual_obj[indivial_i, :] = [ 9. 8. 185. 193.]
291 cord_individual_obj[indivial_i, :] = [ 10. 7. 84. 91.]
292 cord_individual_obj[indivial_i, :] = [ 11. 8. 125. 133.]
293 cord_individual_obj[indivial_i, :] = [ 12. 8. 172. 180.]
294 cord_individual_obj[indivial_i, :] = [ 13. 7. 84. 91.]
295 cord_individual_obj[indivial_i, :] = [ 14. 9. 148. 157.]
296 cord_individual_obj[indivial_i, :] = [ 15. 8. 130. 138.]
297 cord_individual_obj[indivial_i, :] = [ 16. 8. 83. 91.]
298 cord_individual_obj[indivial_i, :] = [ 17. 8. 215. 223.]
299 cord_individual_obj[indivial_i, :] = [ 18. 8. 130. 138.]
300 cord_individual_obj[indivial_i, :] = [ 19. 9. 100. 109.]
301 cord_individual_obj[indivial_i, :] = [ 20. 10. 265. 275.]
302 cord_individual_obj[indivial_i, :] = [ 21. 7. 67. 74.]
303 cord_individual_obj[indivial_i, :] = [ 22. 9. 196. 205.]
304 cord_individual_obj[indivial_i, :] = [ 23. 9. 213. 222.]
305 cord_individual_obj[indivial_i, :] = [ 24. 8. 180. 188.]
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. 10. 97. 107.]
313 cord_individual_obj[indivial_i, :] = [ 1. 9. 105. 114.]
314 cord_individual_obj[indivial_i, :] = [ 2. 9. 154. 163.]
315 cord_individual_obj[indivial_i, :] = [ 3. 8. 90. 98.]
316 cord_individual_obj[indivial_i, :] = [ 4. 7. 158. 165.]
317 cord_individual_obj[indivial_i, :] = [ 5. 8. 174. 182.]
318 cord_individual_obj[indivial_i, :] = [ 6. 7. 143. 150.]
319 cord_individual_obj[indivial_i, :] = [ 7. 7. 142. 149.]
320 cord_individual_obj[indivial_i, :] = [ 8. 7. 199. 206.]
321 cord_individual_obj[indivial_i, :] = [ 9. 8. 130. 138.]
322 cord_individual_obj[indivial_i, :] = [ 10. 9. 113. 122.]
323 cord_individual_obj[indivial_i, :] = [ 11. 7. 93. 100.]
324 cord_individual_obj[indivial_i, :] = [ 12. 8. 95. 103.]
325 cord_individual_obj[indivial_i, :] = [ 13. 7. 155. 162.]
326 cord_individual_obj[indivial_i, :] = [ 14. 8. 77. 85.]
327 cord_individual_obj[indivial_i, :] = [ 15. 8. 157. 165.]
328 cord_individual_obj[indivial_i, :] = [ 16. 8. 102. 110.]
329 cord_individual_obj[indivial_i, :] = [ 17. 7. 151. 158.]
330 cord_individual_obj[indivial_i, :] = [ 18. 10. 110. 120.]
331 cord_individual_obj[indivial_i, :] = [ 19. 10. 117. 127.]

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332 cord_individual_obj[indivial_i, :] = [20. 7. 67. 74.]
333 cord_individual_obj[indivial_i, :] = [21. 9. 115. 124.]
334 cord_individual_obj[indivial_i, :] = [22. 8. 178. 186.]
335 cord_individual_obj[indivial_i, :] = [23. 9. 189. 198.]
336 cord_individual_obj[indivial_i, :] = [24. 10. 203. 213.]
337
338 min(cord_individual_obj[:, 3]) = 74.0
339 histol_G_best_iter[iter, 3] = 74.0
340 Begin iteration:
341
342 iter = 10
343 cord_individual_obj[indivial_i, :] = [ 0. 7. 135. 142.]
344 cord_individual_obj[indivial_i, :] = [ 1. 10. 121. 131.]
345 cord_individual_obj[indivial_i, :] = [ 2. 7. 103. 110.]
346 cord_individual_obj[indivial_i, :] = [ 3. 7. 118. 125.]
347 cord_individual_obj[indivial_i, :] = [ 4. 9. 123. 132.]
348 cord_individual_obj[indivial_i, :] = [ 5. 8. 99. 107.]
349 cord_individual_obj[indivial_i, :] = [ 6. 9. 184. 193.]
350 cord_individual_obj[indivial_i, :] = [ 7. 7. 138. 145.]
351 cord_individual_obj[indivial_i, :] = [ 8. 8. 128. 136.]
352 cord_individual_obj[indivial_i, :] = [ 9. 8. 164. 172.]
353 cord_individual_obj[indivial_i, :] = [10. 9. 155. 164.]
354 cord_individual_obj[indivial_i, :] = [11. 7. 110. 117.]
355 cord_individual_obj[indivial_i, :] = [12. 8. 119. 127.]
356 cord_individual_obj[indivial_i, :] = [13. 7. 141. 148.]
357 cord_individual_obj[indivial_i, :] = [14. 8. 140. 148.]
358 cord_individual_obj[indivial_i, :] = [15. 8. 84. 92.]
359 cord_individual_obj[indivial_i, :] = [16. 8. 152. 160.]
360 cord_individual_obj[indivial_i, :] = [17. 9. 127. 136.]
361 cord_individual_obj[indivial_i, :] = [18. 8. 151. 159.]
362 cord_individual_obj[indivial_i, :] = [19. 8. 99. 107.]
363 cord_individual_obj[indivial_i, :] = [20. 10. 122. 132.]
364 cord_individual_obj[indivial_i, :] = [21. 8. 123. 131.]
365 cord_individual_obj[indivial_i, :] = [22. 8. 154. 162.]
366 cord_individual_obj[indivial_i, :] = [23. 8. 147. 155.]
367 cord_individual_obj[indivial_i, :] = [24. 7. 67. 74.]
368
369 min(cord_individual_obj[:, 3]) = 74.0
370 histol_G_best_iter[iter, 3] = 74.0
371 Begin iteration:
372
373 iter = 11
374 cord_individual_obj[indivial_i, :] = [ 0. 10. 135. 145.]
375 cord_individual_obj[indivial_i, :] = [ 1. 7. 199. 206.]
376 cord_individual_obj[indivial_i, :] = [ 2. 8. 150. 158.]
377 cord_individual_obj[indivial_i, :] = [ 3. 8. 126. 134.]
378 cord_individual_obj[indivial_i, :] = [ 4. 8. 140. 148.]
379 cord_individual_obj[indivial_i, :] = [ 5. 9. 170. 179.]
380 cord_individual_obj[indivial_i, :] = [ 6. 7. 67. 74.]
381 cord_individual_obj[indivial_i, :] = [ 7. 7. 209. 216.]
382 cord_individual_obj[indivial_i, :] = [ 8. 8. 199. 207.]
383 cord_individual_obj[indivial_i, :] = [ 9. 7. 128. 135.]
384 cord_individual_obj[indivial_i, :] = [10. 9. 144. 153.]
385 cord_individual_obj[indivial_i, :] = [11. 7. 158. 165.]
386 cord_individual_obj[indivial_i, :] = [12. 8. 124. 132.]
387 cord_individual_obj[indivial_i, :] = [13. 7. 103. 110.]
388 cord_individual_obj[indivial_i, :] = [14. 8. 124. 132.]
389 cord_individual_obj[indivial_i, :] = [15. 8. 156. 164.]
390 cord_individual_obj[indivial_i, :] = [16. 7. 123. 130.]
391 cord_individual_obj[indivial_i, :] = [17. 8. 225. 233.]
392 cord_individual_obj[indivial_i, :] = [18. 9. 131. 140.]
393 cord_individual_obj[indivial_i, :] = [19. 8. 138. 146.]
394 cord_individual_obj[indivial_i, :] = [20. 9. 129. 138.]
395 cord_individual_obj[indivial_i, :] = [21. 8. 136. 144.]
396 cord_individual_obj[indivial_i, :] = [22. 8. 161. 169.]
397 cord_individual_obj[indivial_i, :] = [23. 7. 148. 155.]
398 cord_individual_obj[indivial_i, :] = [24. 10. 137. 147.]
399
400 min(cord_individual_obj[:, 3]) = 74.0
401 histol_G_best_iter[iter, 3] = 74.0
402 Begin iteration:
403
404 iter = 12
405 cord_individual_obj[indivial_i, :] = [ 0. 9. 100. 109.]
406 cord_individual_obj[indivial_i, :] = [ 1. 10. 155. 165.]
407 cord_individual_obj[indivial_i, :] = [ 2. 11. 213. 224.]
408 cord_individual_obj[indivial_i, :] = [ 3. 7. 150. 157.]
409 cord_individual_obj[indivial_i, :] = [ 4. 9. 178. 187.]
410 cord_individual_obj[indivial_i, :] = [ 5. 7. 200. 207.]
411 cord_individual_obj[indivial_i, :] = [ 6. 7. 163. 170.]
412 cord_individual_obj[indivial_i, :] = [ 7. 9. 185. 194.]
413 cord_individual_obj[indivial_i, :] = [ 8. 8. 122. 130.]
414 cord_individual_obj[indivial_i, :] = [ 9. 8. 141. 149.]
415 cord_individual_obj[indivial_i, :] = [10. 8. 106. 114.]

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416 cord_individual_obj[indivial_i,:] = [ 11. 7. 118. 125.]
417 cord_individual_obj[indivial_i,:] = [ 12. 7. 108. 115.]
418 cord_individual_obj[indivial_i,:] = [ 13. 9. 195. 204.]
419 cord_individual_obj[indivial_i,:] = [ 14. 9. 99. 108.]
420 cord_individual_obj[indivial_i,:] = [15. 10. 89. 99.]
421 cord_individual_obj[indivial_i,:] = [ 16. 9. 115. 124.]
422 cord_individual_obj[indivial_i,:] = [17. 7. 67. 74.]
423 cord_individual_obj[indivial_i,:] = [ 18. 9. 116. 125.]
424 cord_individual_obj[indivial_i,:] = [ 19. 8. 123. 131.]
425 cord_individual_obj[indivial_i,:] = [ 20. 8. 157. 165.]
426 cord_individual_obj[indivial_i,:] = [ 21. 7. 145. 152.]
427 cord_individual_obj[indivial_i,:] = [ 22. 8. 161. 169.]
428 cord_individual_obj[indivial_i,:] = [ 23. 8. 117. 125.]
429 cord_individual_obj[indivial_i,:] = [ 24. 8. 184. 192.]
430
431 min(cord_individual_obj[:,3]) = 74.0
432 histol_G_best_iter[iter,3] = 74.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [ 0. 8. 140. 148.]
437 cord_individual_obj[indivial_i,:] = [ 1. 14. 232. 246.]
438 cord_individual_obj[indivial_i,:] = [ 2. 7. 67. 74.]
439 cord_individual_obj[indivial_i,:] = [ 3. 8. 115. 123.]
440 cord_individual_obj[indivial_i,:] = [ 4. 7. 123. 130.]
441 cord_individual_obj[indivial_i,:] = [ 5. 9. 134. 143.]
442 cord_individual_obj[indivial_i,:] = [ 6. 9. 189. 198.]
443 cord_individual_obj[indivial_i,:] = [ 7. 7. 173. 180.]
444 cord_individual_obj[indivial_i,:] = [ 8. 10. 165. 175.]
445 cord_individual_obj[indivial_i,:] = [ 9. 8. 86. 94.]
446 cord_individual_obj[indivial_i,:] = [10. 8. 132. 140.]
447 cord_individual_obj[indivial_i,:] = [11. 7. 125. 132.]
448 cord_individual_obj[indivial_i,:] = [12. 8. 89. 97.]
449 cord_individual_obj[indivial_i,:] = [13. 7. 178. 185.]
450 cord_individual_obj[indivial_i,:] = [14. 9. 131. 140.]
451 cord_individual_obj[indivial_i,:] = [15. 9. 179. 188.]
452 cord_individual_obj[indivial_i,:] = [16. 8. 145. 153.]
453 cord_individual_obj[indivial_i,:] = [17. 8. 145. 153.]
454 cord_individual_obj[indivial_i,:] = [18. 9. 163. 172.]
455 cord_individual_obj[indivial_i,:] = [19. 8. 103. 111.]
456 cord_individual_obj[indivial_i,:] = [20. 9. 159. 168.]
457 cord_individual_obj[indivial_i,:] = [21. 8. 254. 262.]
458 cord_individual_obj[indivial_i,:] = [22. 9. 113. 122.]
459 cord_individual_obj[indivial_i,:] = [23. 7. 127. 134.]
460 cord_individual_obj[indivial_i,:] = [24. 10. 159. 169.]
461
462 min(cord_individual_obj[:,3]) = 74.0
463 histol_G_best_iter[iter,3] = 74.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [ 0. 9. 154. 163.]
468 cord_individual_obj[indivial_i,:] = [ 1. 10. 124. 134.]
469 cord_individual_obj[indivial_i,:] = [ 2. 9. 123. 132.]
470 cord_individual_obj[indivial_i,:] = [ 3. 7. 178. 185.]
471 cord_individual_obj[indivial_i,:] = [ 4. 7. 124. 131.]
472 cord_individual_obj[indivial_i,:] = [ 5. 6. 113. 119.]
473 cord_individual_obj[indivial_i,:] = [ 6. 7. 146. 153.]
474 cord_individual_obj[indivial_i,:] = [ 7. 8. 157. 165.]
475 cord_individual_obj[indivial_i,:] = [ 8. 8. 113. 121.]
476 cord_individual_obj[indivial_i,:] = [ 9. 8. 150. 158.]
477 cord_individual_obj[indivial_i,:] = [10. 8. 141. 149.]
478 cord_individual_obj[indivial_i,:] = [11. 8. 180. 188.]
479 cord_individual_obj[indivial_i,:] = [12. 7. 149. 156.]
480 cord_individual_obj[indivial_i,:] = [13. 7. 145. 152.]
481 cord_individual_obj[indivial_i,:] = [14. 7. 81. 88.]
482 cord_individual_obj[indivial_i,:] = [15. 6. 169. 175.]
483 cord_individual_obj[indivial_i,:] = [16. 9. 164. 173.]
484 cord_individual_obj[indivial_i,:] = [17. 8. 99. 107.]
485 cord_individual_obj[indivial_i,:] = [18. 9. 149. 158.]
486 cord_individual_obj[indivial_i,:] = [19. 7. 142. 149.]
487 cord_individual_obj[indivial_i,:] = [20. 9. 153. 162.]
488 cord_individual_obj[indivial_i,:] = [21. 7. 67. 74.]
489 cord_individual_obj[indivial_i,:] = [22. 9. 143. 152.]
490 cord_individual_obj[indivial_i,:] = [23. 8. 120. 128.]
491 cord_individual_obj[indivial_i,:] = [24. 10. 184. 194.]
492
493 min(cord_individual_obj[:,3]) = 74.0
494 histol_G_best_iter[iter,3] = 74.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [ 0. 8. 117. 125.]
499 cord_individual_obj[indivial_i,:] = [ 1. 9. 128. 137.]

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500 cord_individual_obj[indivial_i,:] = [ 2. 9. 183. 192.]
501 cord_individual_obj[indivial_i,:] = [ 3. 7. 130. 137.]
502 cord_individual_obj[indivial_i,:] = [ 4. 8. 166. 174.]
503 cord_individual_obj[indivial_i,:] = [ 5. 8. 159. 167.]
504 cord_individual_obj[indivial_i,:] = [ 6. 7. 95. 102.]
505 cord_individual_obj[indivial_i,:] = [ 7. 5. 138. 143.]
506 cord_individual_obj[indivial_i,:] = [ 8. 8. 156. 164.]
507 cord_individual_obj[indivial_i,:] = [ 9. 8. 134. 142.]
508 cord_individual_obj[indivial_i,:] = [10. 9. 89. 98.]
509 cord_individual_obj[indivial_i,:] = [11. 8. 159. 167.]
510 cord_individual_obj[indivial_i,:] = [12. 8. 98. 106.]
511 cord_individual_obj[indivial_i,:] = [13. 8. 241. 249.]
512 cord_individual_obj[indivial_i,:] = [14. 8. 135. 143.]
513 cord_individual_obj[indivial_i,:] = [15. 8. 113. 121.]
514 cord_individual_obj[indivial_i,:] = [16. 9. 105. 114.]
515 cord_individual_obj[indivial_i,:] = [17. 8. 209. 217.]
516 cord_individual_obj[indivial_i,:] = [18. 9. 148. 157.]
517 cord_individual_obj[indivial_i,:] = [19. 9. 246. 255.]
518 cord_individual_obj[indivial_i,:] = [20. 8. 127. 135.]
519 cord_individual_obj[indivial_i,:] = [21. 8. 106. 114.]
520 cord_individual_obj[indivial_i,:] = [22. 8. 148. 156.]
521 cord_individual_obj[indivial_i,:] = [23. 10. 187. 197.]
522 cord_individual_obj[indivial_i,:] = [24. 7. 67. 74.]
523
524 min(cord_individual_obj[:, 3]) = 74.0
525 histol_G_best_iter[iter, 3] = 74.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i,:] = [ 0. 8. 135. 143.]
530 cord_individual_obj[indivial_i,:] = [ 1. 9. 96. 105.]
531 cord_individual_obj[indivial_i,:] = [ 2. 8. 175. 183.]
532 cord_individual_obj[indivial_i,:] = [ 3. 9. 99. 108.]
533 cord_individual_obj[indivial_i,:] = [ 4. 11. 149. 160.]
534 cord_individual_obj[indivial_i,:] = [ 5. 8. 119. 127.]
535 cord_individual_obj[indivial_i,:] = [ 6. 10. 136. 146.]
536 cord_individual_obj[indivial_i,:] = [ 7. 5. 215. 220.]
537 cord_individual_obj[indivial_i,:] = [ 8. 8. 147. 155.]
538 cord_individual_obj[indivial_i,:] = [ 9. 10. 121. 131.]
539 cord_individual_obj[indivial_i,:] = [10. 8. 162. 170.]
540 cord_individual_obj[indivial_i,:] = [11. 8. 199. 207.]
541 cord_individual_obj[indivial_i,:] = [12. 7. 129. 136.]
542 cord_individual_obj[indivial_i,:] = [13. 8. 97. 105.]
543 cord_individual_obj[indivial_i,:] = [14. 10. 126. 136.]
544 cord_individual_obj[indivial_i,:] = [15. 7. 157. 164.]
545 cord_individual_obj[indivial_i,:] = [16. 9. 126. 135.]
546 cord_individual_obj[indivial_i,:] = [17. 8. 200. 208.]
547 cord_individual_obj[indivial_i,:] = [18. 8. 95. 103.]
548 cord_individual_obj[indivial_i,:] = [19. 7. 67. 74.]
549 cord_individual_obj[indivial_i,:] = [20. 9. 166. 175.]
550 cord_individual_obj[indivial_i,:] = [21. 7. 236. 243.]
551 cord_individual_obj[indivial_i,:] = [22. 9. 135. 144.]
552 cord_individual_obj[indivial_i,:] = [23. 8. 196. 204.]
553 cord_individual_obj[indivial_i,:] = [24. 9. 170. 179.]
554
555 min(cord_individual_obj[:, 3]) = 74.0
556 histol_G_best_iter[iter, 3] = 74.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i,:] = [ 0. 6. 140. 146.]
561 cord_individual_obj[indivial_i,:] = [ 1. 9. 161. 170.]
562 cord_individual_obj[indivial_i,:] = [ 2. 9. 201. 210.]
563 cord_individual_obj[indivial_i,:] = [ 3. 7. 130. 137.]
564 cord_individual_obj[indivial_i,:] = [ 4. 9. 99. 108.]
565 cord_individual_obj[indivial_i,:] = [ 5. 9. 113. 122.]
566 cord_individual_obj[indivial_i,:] = [ 6. 7. 88. 95.]
567 cord_individual_obj[indivial_i,:] = [ 7. 7. 167. 174.]
568 cord_individual_obj[indivial_i,:] = [ 8. 8. 115. 123.]
569 cord_individual_obj[indivial_i,:] = [ 9. 8. 112. 120.]
570 cord_individual_obj[indivial_i,:] = [10. 8. 208. 216.]
571 cord_individual_obj[indivial_i,:] = [11. 8. 107. 115.]
572 cord_individual_obj[indivial_i,:] = [12. 8. 115. 123.]
573 cord_individual_obj[indivial_i,:] = [13. 7. 145. 152.]
574 cord_individual_obj[indivial_i,:] = [14. 7. 152. 159.]
575 cord_individual_obj[indivial_i,:] = [15. 8. 131. 139.]
576 cord_individual_obj[indivial_i,:] = [16. 8. 148. 156.]
577 cord_individual_obj[indivial_i,:] = [17. 9. 156. 165.]
578 cord_individual_obj[indivial_i,:] = [18. 7. 99. 106.]
579 cord_individual_obj[indivial_i,:] = [19. 8. 129. 137.]
580 cord_individual_obj[indivial_i,:] = [20. 8. 104. 112.]
581 cord_individual_obj[indivial_i,:] = [21. 7. 67. 74.]
582 cord_individual_obj[indivial_i,:] = [22. 8. 128. 136.]
583 cord_individual_obj[indivial_i,:] = [23. 7. 173. 180.]

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584     cord_individual_obj[indivial_i, :] = [ 24.  7. 130. 137.]
585
586     min(cord_individual_obj[:, 3]) = 74.0
587     historl_G_best_iter[iter, 3] = 74.0
588 Begin iteration:
589
590 iter = 18
591     cord_individual_obj[indivial_i, :] = [ 0.  8. 150. 158.]
592     cord_individual_obj[indivial_i, :] = [ 1. 10. 84. 94.]
593     cord_individual_obj[indivial_i, :] = [ 2.  8. 149. 157.]
594     cord_individual_obj[indivial_i, :] = [ 3.  7. 161. 168.]
595     cord_individual_obj[indivial_i, :] = [ 4.  7. 159. 166.]
596     cord_individual_obj[indivial_i, :] = [ 5.  8. 193. 201.]
597     cord_individual_obj[indivial_i, :] = [ 6.  8. 104. 112.]
598     cord_individual_obj[indivial_i, :] = [ 7.  8. 127. 135.]
599     cord_individual_obj[indivial_i, :] = [ 8.  8. 149. 157.]
600     cord_individual_obj[indivial_i, :] = [ 9.  7. 187. 194.]
601     cord_individual_obj[indivial_i, :] = [10.  7. 67. 74.]
602     cord_individual_obj[indivial_i, :] = [11.  8. 170. 178.]
603     cord_individual_obj[indivial_i, :] = [12.  8. 144. 152.]
604     cord_individual_obj[indivial_i, :] = [13.  8. 206. 214.]
605     cord_individual_obj[indivial_i, :] = [14.  9. 151. 160.]
606     cord_individual_obj[indivial_i, :] = [15.  9. 132. 141.]
607     cord_individual_obj[indivial_i, :] = [16.  9. 99. 108.]
608     cord_individual_obj[indivial_i, :] = [17.  9. 128. 137.]
609     cord_individual_obj[indivial_i, :] = [18.  8. 181. 189.]
610     cord_individual_obj[indivial_i, :] = [19.  8. 147. 155.]
611     cord_individual_obj[indivial_i, :] = [20. 11. 166. 177.]
612     cord_individual_obj[indivial_i, :] = [21.  7. 125. 132.]
613     cord_individual_obj[indivial_i, :] = [22.  8. 144. 152.]
614     cord_individual_obj[indivial_i, :] = [23.  7. 177. 184.]
615     cord_individual_obj[indivial_i, :] = [24.  8. 112. 120.]
616
617     min(cord_individual_obj[:, 3]) = 74.0
618     historl_G_best_iter[iter, 3] = 74.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0. 11. 172. 183.]
623     cord_individual_obj[indivial_i, :] = [ 1. 9. 225. 234.]
624     cord_individual_obj[indivial_i, :] = [ 2.  9. 123. 132.]
625     cord_individual_obj[indivial_i, :] = [ 3.  8. 130. 138.]
626     cord_individual_obj[indivial_i, :] = [ 4.  8. 151. 159.]
627     cord_individual_obj[indivial_i, :] = [ 5.  7. 121. 128.]
628     cord_individual_obj[indivial_i, :] = [ 6.  7. 164. 171.]
629     cord_individual_obj[indivial_i, :] = [ 7.  8. 98. 106.]
630     cord_individual_obj[indivial_i, :] = [ 8. 10. 102. 112.]
631     cord_individual_obj[indivial_i, :] = [ 9.  8. 144. 152.]
632     cord_individual_obj[indivial_i, :] = [10.  8. 132. 140.]
633     cord_individual_obj[indivial_i, :] = [11.  8. 117. 125.]
634     cord_individual_obj[indivial_i, :] = [12.  7. 150. 157.]
635     cord_individual_obj[indivial_i, :] = [13.  7. 67. 74.]
636     cord_individual_obj[indivial_i, :] = [14.  8. 186. 194.]
637     cord_individual_obj[indivial_i, :] = [15.  8. 124. 132.]
638     cord_individual_obj[indivial_i, :] = [16. 10. 107. 117.]
639     cord_individual_obj[indivial_i, :] = [17. 11. 170. 181.]
640     cord_individual_obj[indivial_i, :] = [18.  9. 154. 163.]
641     cord_individual_obj[indivial_i, :] = [19. 10. 155. 165.]
642     cord_individual_obj[indivial_i, :] = [20. 11. 159. 170.]
643     cord_individual_obj[indivial_i, :] = [21.  7. 128. 135.]
644     cord_individual_obj[indivial_i, :] = [22.  7. 176. 183.]
645     cord_individual_obj[indivial_i, :] = [23.  8. 143. 151.]
646     cord_individual_obj[indivial_i, :] = [24. 10. 122. 132.]
647
648     min(cord_individual_obj[:, 3]) = 74.0
649     historl_G_best_iter[iter, 3] = 74.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0.  8. 170. 178.]
654     cord_individual_obj[indivial_i, :] = [ 1. 7. 67. 74.]
655     cord_individual_obj[indivial_i, :] = [ 2. 10. 189. 199.]
656     cord_individual_obj[indivial_i, :] = [ 3.  7. 105. 112.]
657     cord_individual_obj[indivial_i, :] = [ 4. 10. 137. 147.]
658     cord_individual_obj[indivial_i, :] = [ 5.  8. 153. 161.]
659     cord_individual_obj[indivial_i, :] = [ 6.  8. 131. 139.]
660     cord_individual_obj[indivial_i, :] = [ 7.  6. 152. 158.]
661     cord_individual_obj[indivial_i, :] = [ 8.  8. 161. 169.]
662     cord_individual_obj[indivial_i, :] = [ 9.  8. 120. 128.]
663     cord_individual_obj[indivial_i, :] = [10.  8. 132. 140.]
664     cord_individual_obj[indivial_i, :] = [11.  8. 150. 158.]
665     cord_individual_obj[indivial_i, :] = [12.  8. 115. 123.]
666     cord_individual_obj[indivial_i, :] = [13.  8. 146. 154.]
667     cord_individual_obj[indivial_i, :] = [14.  7. 213. 220.]

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668 cord_individual_obj[indivial_i,:] = [ 15. 7. 144. 151.]
669 cord_individual_obj[indivial_i,:] = [ 16. 9. 119. 128.]
670 cord_individual_obj[indivial_i,:] = [ 17. 8. 161. 169.]
671 cord_individual_obj[indivial_i,:] = [ 18. 11. 114. 125.]
672 cord_individual_obj[indivial_i,:] = [ 19. 9. 142. 151.]
673 cord_individual_obj[indivial_i,:] = [ 20. 11. 145. 156.]
674 cord_individual_obj[indivial_i,:] = [ 21. 7. 168. 175.]
675 cord_individual_obj[indivial_i,:] = [ 22. 8. 158. 166.]
676 cord_individual_obj[indivial_i,:] = [ 23. 8. 127. 135.]
677 cord_individual_obj[indivial_i,:] = [ 24. 10. 144. 154.]
678
679 min(cord_individual_obj[:,3]) = 74.0
680 historl_G_best_iter[iter, 3] = 74.0
681 Iteration calculate over
682
683
684
685
686 All item are in Bin and:
687 Bin area = 1080
688 Real_area = 202.0
689 Proportion_of_area = 0.18703703703703703
690 BEST_CHROM =
691 berth: [ 4.5 4.5 22. 12.5 14. 19.5 11. 10.5 26.5 3. 14.5 17.5 20. 4.5
692 26. ]
693 time: [0. 5. 6. 2. 3. 0. 0. 3. 2. 3. 0. 4. 2. 1. 0.]
694 num_QC: [3. 3. 5. 6. 3. 2. 3. 3. 2. 4. 3. 3. 5. 4. 2.]
695 Objective function values and some other indicators:
696 Obj0 = 7.00          Obj1 = 67.00        Obj0 + Obj1 = 74.00
697 Total movement of crane: 18.00
698 Total waiting time in berth position: 31.00
699 Total index of q during berthing: 1039.00
700 Specific arrangement for each vessel:
701 V_id: 0      li: 9.0      xi: 4.5      bow of i: 0.0      tail of i: 9.0      gama_i0: 0.0      gama_i1: 0.0
    .0           gama_i1 + 1: 1.0      gama_i1 - gama_i0: 0.0      duration_time_i: 1.0      demand_i: 60.0      work load_i:
60.0          work load gap_i: 0
702 V_id: 1      li: 9.0      xi: 4.5      bow of i: 0.0      tail of i: 9.0      gama_i0: 5.0      gama_i1: 6.0
    .0           gama_i1 + 1: 7.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 80.0      work load_i:
80.0          work load gap_i: 0
703 V_id: 2      li: 6.0      xi: 22.0      bow of i: 19.0      tail of i: 25.0      gama_i0: 6.0      gama_i1: 7
    .0           gama_i1 + 1: 8.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 120.0      work
load_i: 120.0 work load gap_i: 0
704 V_id: 3      li: 7.0      xi: 12.5      bow of i: 9.0      tail of i: 16.0      gama_i0: 2.0      gama_i1: 2
    .0           gama_i1 + 1: 3.0      gama_i1 - gama_i0: 0.0      duration_time_i: 1.0      demand_i: 100.0      work
load_i: 100.0 work load gap_i: 0
705 V_id: 4      li: 4.0      xi: 14.0      bow of i: 12.0      tail of i: 16.0      gama_i0: 3.0      gama_i1: 5
    .0           gama_i1 + 1: 6.0      gama_i1 - gama_i0: 2.0      duration_time_i: 3.0      demand_i: 140.0      work
load_i: 140.0 work load gap_i: 0
706 V_id: 5      li: 7.0      xi: 19.5      bow of i: 16.0      tail of i: 23.0      gama_i0: 0.0      gama_i1: 1
    .0           gama_i1 + 1: 2.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 60.0      work
load_i: 60.0 work load gap_i: 0
707 V_id: 6      li: 4.0      xi: 11.0      bow of i: 9.0      tail of i: 13.0      gama_i0: 0.0      gama_i1: 1
    .0           gama_i1 + 1: 2.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 100.0      work
load_i: 100.0 work load gap_i: 0
708 V_id: 7      li: 3.0      xi: 10.5      bow of i: 9.0      tail of i: 12.0      gama_i0: 3.0      gama_i1: 5
    .0           gama_i1 + 1: 6.0      gama_i1 - gama_i0: 2.0      duration_time_i: 3.0      demand_i: 140.0      work
load_i: 140.0 work load gap_i: 0
709 V_id: 8      li: 5.0      xi: 26.5      bow of i: 24.0      tail of i: 29.0      gama_i0: 2.0      gama_i1: 5
    .0           gama_i1 + 1: 6.0      gama_i1 - gama_i0: 3.0      duration_time_i: 4.0      demand_i: 160.0      work
load_i: 160.0 work load gap_i: 0
710 V_id: 9      li: 6.0      xi: 3.0      bow of i: 0.0      tail of i: 6.0      gama_i0: 3.0      gama_i1: 4.0
    .0           gama_i1 + 1: 5.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 120.0      work load_i:
120.0          work load gap_i: 0
711 V_id: 10     li: 3.0      xi: 14.5      bow of i: 13.0      tail of i: 16.0      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: 80.0      work
load_i: 80.0 work load gap_i: 0
712 V_id: 11     li: 3.0      xi: 17.5      bow of i: 16.0      tail of i: 19.0      gama_i0: 4.0      gama_i1: 1
    : 6.0         gama_i1 + 1: 7.0      gama_i1 - gama_i0: 2.0      duration_time_i: 3.0      demand_i: 160.0      work
load_i: 160.0 work load gap_i: 0
713 V_id: 12     li: 8.0      xi: 20.0      bow of i: 16.0      tail of i: 24.0      gama_i0: 2.0      gama_i1: 1
    : 3.0         gama_i1 + 1: 4.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 160.0      work
load_i: 160.0 work load gap_i: 0
714 V_id: 13     li: 9.0      xi: 4.5      bow of i: 0.0      tail of i: 9.0      gama_i0: 1.0      gama_i1: 2.0
    100.0        gama_i1 + 1: 3.0      gama_i1 - gama_i0: 1.0      duration_time_i: 2.0      demand_i: 100.0      work load_i:
100.0          work load gap_i: 0
715 V_id: 14     li: 6.0      xi: 26.0      bow of i: 23.0      tail of i: 29.0      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: 80.0      work
load_i: 80.0 work load gap_i: 0
716
717 Algorithm finished and the total CPU time: 448 s
718 End
719

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