

unknown

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80 cord_individual_obj[indivial_i,:] = [ 16. 10. 101. 111.]
81 cord_individual_obj[indivial_i,:] = [ 17. 7. 141. 148.]
82 cord_individual_obj[indivial_i,:] = [ 18. 10. 131. 141.]
83 cord_individual_obj[indivial_i,:] = [ 19. 11. 146. 157.]
84 cord_individual_obj[indivial_i,:] = [ 20. 11. 184. 195.]
85 cord_individual_obj[indivial_i,:] = [ 21. 8. 161. 169.]
86 cord_individual_obj[indivial_i,:] = [ 22. 9. 86. 95.]
87 cord_individual_obj[indivial_i,:] = [ 23. 10. 147. 157.]
88 cord_individual_obj[indivial_i,:] = [ 24. 7. 116. 123.]
89
90 min(cord_individual_obj[:,3]) = 90.0
91 historl_G_best_iter[iter, 3] = 90.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 7. 83. 90.]
96 cord_individual_obj[indivial_i,:] = [ 1. 6. 105. 111.]
97 cord_individual_obj[indivial_i,:] = [ 2. 8. 136. 144.]
98 cord_individual_obj[indivial_i,:] = [ 3. 8. 89. 97.]
99 cord_individual_obj[indivial_i,:] = [ 4. 9. 112. 121.]
100 cord_individual_obj[indivial_i,:] = [ 5. 8. 164. 172.]
101 cord_individual_obj[indivial_i,:] = [ 6. 11. 147. 158.]
102 cord_individual_obj[indivial_i,:] = [ 7. 11. 105. 116.]
103 cord_individual_obj[indivial_i,:] = [ 8. 7. 103. 110.]
104 cord_individual_obj[indivial_i,:] = [ 9. 8. 135. 143.]
105 cord_individual_obj[indivial_i,:] = [ 10. 9. 151. 160.]
106 cord_individual_obj[indivial_i,:] = [ 11. 9. 152. 161.]
107 cord_individual_obj[indivial_i,:] = [ 12. 8. 135. 143.]
108 cord_individual_obj[indivial_i,:] = [ 13. 10. 195. 205.]
109 cord_individual_obj[indivial_i,:] = [ 14. 8. 197. 205.]
110 cord_individual_obj[indivial_i,:] = [ 15. 8. 128. 136.]
111 cord_individual_obj[indivial_i,:] = [ 16. 10. 137. 147.]
112 cord_individual_obj[indivial_i,:] = [ 17. 9. 162. 171.]
113 cord_individual_obj[indivial_i,:] = [ 18. 8. 123. 131.]
114 cord_individual_obj[indivial_i,:] = [ 19. 10. 111. 121.]
115 cord_individual_obj[indivial_i,:] = [ 20. 9. 152. 161.]
116 cord_individual_obj[indivial_i,:] = [ 21. 10. 150. 160.]
117 cord_individual_obj[indivial_i,:] = [ 22. 8. 84. 92.]
118 cord_individual_obj[indivial_i,:] = [ 23. 9. 155. 164.]
119 cord_individual_obj[indivial_i,:] = [ 24. 9. 131. 140.]
120
121 min(cord_individual_obj[:,3]) = 90.0
122 historl_G_best_iter[iter, 3] = 90.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 10. 113. 123.]
127 cord_individual_obj[indivial_i,:] = [ 1. 6. 140. 146.]
128 cord_individual_obj[indivial_i,:] = [ 2. 8. 119. 127.]
129 cord_individual_obj[indivial_i,:] = [ 3. 7. 102. 109.]
130 cord_individual_obj[indivial_i,:] = [ 4. 9. 113. 122.]
131 cord_individual_obj[indivial_i,:] = [ 5. 8. 127. 135.]
132 cord_individual_obj[indivial_i,:] = [ 6. 10. 176. 186.]
133 cord_individual_obj[indivial_i,:] = [ 7. 7. 139. 146.]
134 cord_individual_obj[indivial_i,:] = [ 8. 9. 114. 123.]
135 cord_individual_obj[indivial_i,:] = [ 9. 10. 148. 158.]
136 cord_individual_obj[indivial_i,:] = [ 10. 7. 97. 104.]
137 cord_individual_obj[indivial_i,:] = [ 11. 7. 121. 128.]
138 cord_individual_obj[indivial_i,:] = [ 12. 9. 110. 119.]
139 cord_individual_obj[indivial_i,:] = [ 13. 7. 83. 90.]
140 cord_individual_obj[indivial_i,:] = [ 14. 8. 118. 126.]
141 cord_individual_obj[indivial_i,:] = [ 15. 7. 112. 119.]
142 cord_individual_obj[indivial_i,:] = [ 16. 7. 97. 104.]
143 cord_individual_obj[indivial_i,:] = [ 17. 8. 221. 229.]
144 cord_individual_obj[indivial_i,:] = [ 18. 7. 139. 146.]
145 cord_individual_obj[indivial_i,:] = [ 19. 8. 128. 136.]
146 cord_individual_obj[indivial_i,:] = [ 20. 8. 98. 106.]
147 cord_individual_obj[indivial_i,:] = [ 21. 7. 120. 127.]
148 cord_individual_obj[indivial_i,:] = [ 22. 8. 92. 100.]
149 cord_individual_obj[indivial_i,:] = [ 23. 8. 137. 145.]
150 cord_individual_obj[indivial_i,:] = [ 24. 9. 133. 142.]
151
152 min(cord_individual_obj[:,3]) = 90.0
153 historl_G_best_iter[iter, 3] = 90.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 7. 166. 173.]
158 cord_individual_obj[indivial_i,:] = [ 1. 8. 126. 134.]
159 cord_individual_obj[indivial_i,:] = [ 2. 7. 139. 146.]
160 cord_individual_obj[indivial_i,:] = [ 3. 8. 110. 118.]
161 cord_individual_obj[indivial_i,:] = [ 4. 10. 98. 108.]
162 cord_individual_obj[indivial_i,:] = [ 5. 13. 206. 219.]
163 cord_individual_obj[indivial_i,:] = [ 6. 9. 135. 144.]

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164 cord_individual_obj[indivial_i, :] = [ 7. 10. 171. 181.]
165 cord_individual_obj[indivial_i, :] = [ 8. 8. 122. 130.]
166 cord_individual_obj[indivial_i, :] = [ 9. 11. 136. 147.]
167 cord_individual_obj[indivial_i, :] = [ 10. 8. 118. 126.]
168 cord_individual_obj[indivial_i, :] = [ 11. 7. 140. 147.]
169 cord_individual_obj[indivial_i, :] = [ 12. 9. 135. 144.]
170 cord_individual_obj[indivial_i, :] = [ 13. 11. 209. 220.]
171 cord_individual_obj[indivial_i, :] = [ 14. 10. 120. 130.]
172 cord_individual_obj[indivial_i, :] = [ 15. 11. 131. 142.]
173 cord_individual_obj[indivial_i, :] = [ 16. 8. 146. 154.]
174 cord_individual_obj[indivial_i, :] = [ 17. 7. 83. 90.]
175 cord_individual_obj[indivial_i, :] = [ 18. 11. 146. 157.]
176 cord_individual_obj[indivial_i, :] = [ 19. 11. 154. 165.]
177 cord_individual_obj[indivial_i, :] = [ 20. 9. 95. 104.]
178 cord_individual_obj[indivial_i, :] = [ 21. 8. 201. 209.]
179 cord_individual_obj[indivial_i, :] = [ 22. 8. 220. 228.]
180 cord_individual_obj[indivial_i, :] = [ 23. 8. 119. 127.]
181 cord_individual_obj[indivial_i, :] = [ 24. 8. 193. 201.]
182
183 min(cord_individual_obj[:, 3]) = 90.0
184 historl_G_best_iter[iter, 3] = 90.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i, :] = [ 0. 9. 105. 114.]
189 cord_individual_obj[indivial_i, :] = [ 1. 8. 117. 125.]
190 cord_individual_obj[indivial_i, :] = [ 2. 8. 114. 122.]
191 cord_individual_obj[indivial_i, :] = [ 3. 6. 91. 97.]
192 cord_individual_obj[indivial_i, :] = [ 4. 10. 130. 140.]
193 cord_individual_obj[indivial_i, :] = [ 5. 8. 138. 146.]
194 cord_individual_obj[indivial_i, :] = [ 6. 9. 126. 135.]
195 cord_individual_obj[indivial_i, :] = [ 7. 9. 127. 136.]
196 cord_individual_obj[indivial_i, :] = [ 8. 10. 122. 132.]
197 cord_individual_obj[indivial_i, :] = [ 9. 9. 123. 132.]
198 cord_individual_obj[indivial_i, :] = [ 10. 7. 175. 182.]
199 cord_individual_obj[indivial_i, :] = [ 11. 6. 137. 143.]
200 cord_individual_obj[indivial_i, :] = [ 12. 9. 138. 147.]
201 cord_individual_obj[indivial_i, :] = [ 13. 8. 101. 109.]
202 cord_individual_obj[indivial_i, :] = [ 14. 9. 162. 171.]
203 cord_individual_obj[indivial_i, :] = [ 15. 6. 119. 125.]
204 cord_individual_obj[indivial_i, :] = [ 16. 12. 150. 162.]
205 cord_individual_obj[indivial_i, :] = [ 17. 9. 153. 162.]
206 cord_individual_obj[indivial_i, :] = [ 18. 8. 145. 153.]
207 cord_individual_obj[indivial_i, :] = [ 19. 11. 104. 115.]
208 cord_individual_obj[indivial_i, :] = [ 20. 10. 158. 168.]
209 cord_individual_obj[indivial_i, :] = [ 21. 7. 157. 164.]
210 cord_individual_obj[indivial_i, :] = [ 22. 7. 83. 90.]
211 cord_individual_obj[indivial_i, :] = [ 23. 8. 117. 125.]
212 cord_individual_obj[indivial_i, :] = [ 24. 10. 145. 155.]
213
214 min(cord_individual_obj[:, 3]) = 90.0
215 historl_G_best_iter[iter, 3] = 90.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i, :] = [ 0. 10. 162. 172.]
220 cord_individual_obj[indivial_i, :] = [ 1. 10. 134. 144.]
221 cord_individual_obj[indivial_i, :] = [ 2. 10. 128. 138.]
222 cord_individual_obj[indivial_i, :] = [ 3. 9. 179. 188.]
223 cord_individual_obj[indivial_i, :] = [ 4. 9. 127. 136.]
224 cord_individual_obj[indivial_i, :] = [ 5. 12. 112. 124.]
225 cord_individual_obj[indivial_i, :] = [ 6. 8. 132. 140.]
226 cord_individual_obj[indivial_i, :] = [ 7. 10. 108. 118.]
227 cord_individual_obj[indivial_i, :] = [ 8. 10. 127. 137.]
228 cord_individual_obj[indivial_i, :] = [ 9. 9. 132. 141.]
229 cord_individual_obj[indivial_i, :] = [ 10. 7. 83. 90.]
230 cord_individual_obj[indivial_i, :] = [ 11. 8. 119. 127.]
231 cord_individual_obj[indivial_i, :] = [ 12. 7. 124. 131.]
232 cord_individual_obj[indivial_i, :] = [ 13. 10. 177. 187.]
233 cord_individual_obj[indivial_i, :] = [ 14. 8. 90. 98.]
234 cord_individual_obj[indivial_i, :] = [ 15. 11. 145. 156.]
235 cord_individual_obj[indivial_i, :] = [ 16. 9. 143. 152.]
236 cord_individual_obj[indivial_i, :] = [ 17. 7. 117. 124.]
237 cord_individual_obj[indivial_i, :] = [ 18. 8. 128. 136.]
238 cord_individual_obj[indivial_i, :] = [ 19. 8. 142. 150.]
239 cord_individual_obj[indivial_i, :] = [ 20. 9. 115. 124.]
240 cord_individual_obj[indivial_i, :] = [ 21. 9. 141. 150.]
241 cord_individual_obj[indivial_i, :] = [ 22. 8. 120. 128.]
242 cord_individual_obj[indivial_i, :] = [ 23. 9. 145. 154.]
243 cord_individual_obj[indivial_i, :] = [ 24. 8. 158. 166.]
244
245 min(cord_individual_obj[:, 3]) = 90.0
246 historl_G_best_iter[iter, 3] = 90.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0. 8. 130. 138.]
251 cord_individual_obj[indivial_i, :] = [ 1. 7. 144. 151.]
252 cord_individual_obj[indivial_i, :] = [ 2. 8. 98. 106.]
253 cord_individual_obj[indivial_i, :] = [ 3. 7. 83. 90.]
254 cord_individual_obj[indivial_i, :] = [ 4. 8. 146. 154.]
255 cord_individual_obj[indivial_i, :] = [ 5. 8. 115. 123.]
256 cord_individual_obj[indivial_i, :] = [ 6. 8. 153. 161.]
257 cord_individual_obj[indivial_i, :] = [ 7. 10. 162. 172.]
258 cord_individual_obj[indivial_i, :] = [ 8. 9. 95. 104.]
259 cord_individual_obj[indivial_i, :] = [ 9. 8. 103. 111.]
260 cord_individual_obj[indivial_i, :] = [ 10. 9. 186. 195.]
261 cord_individual_obj[indivial_i, :] = [ 11. 7. 164. 171.]
262 cord_individual_obj[indivial_i, :] = [ 12. 10. 119. 129.]
263 cord_individual_obj[indivial_i, :] = [ 13. 8. 195. 203.]
264 cord_individual_obj[indivial_i, :] = [ 14. 11. 135. 146.]
265 cord_individual_obj[indivial_i, :] = [ 15. 6. 156. 162.]
266 cord_individual_obj[indivial_i, :] = [ 16. 9. 149. 158.]
267 cord_individual_obj[indivial_i, :] = [ 17. 10. 130. 140.]
268 cord_individual_obj[indivial_i, :] = [ 18. 10. 178. 188.]
269 cord_individual_obj[indivial_i, :] = [ 19. 9. 202. 211.]
270 cord_individual_obj[indivial_i, :] = [ 20. 8. 122. 130.]
271 cord_individual_obj[indivial_i, :] = [ 21. 10. 185. 195.]
272 cord_individual_obj[indivial_i, :] = [ 22. 10. 143. 153.]
273 cord_individual_obj[indivial_i, :] = [ 23. 10. 134. 144.]
274 cord_individual_obj[indivial_i, :] = [ 24. 10. 173. 183.]
275

276 min(cord_individual_obj[:, 3]) = 90.0
277 historl_G_best_iter[iter, 3] = 90.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0. 10. 143. 153.]
282 cord_individual_obj[indivial_i, :] = [ 1. 8. 163. 171.]
283 cord_individual_obj[indivial_i, :] = [ 2. 9. 101. 110.]
284 cord_individual_obj[indivial_i, :] = [ 3. 6. 101. 107.]
285 cord_individual_obj[indivial_i, :] = [ 4. 11. 178. 189.]
286 cord_individual_obj[indivial_i, :] = [ 5. 11. 181. 192.]
287 cord_individual_obj[indivial_i, :] = [ 6. 10. 225. 235.]
288 cord_individual_obj[indivial_i, :] = [ 7. 9. 116. 125.]
289 cord_individual_obj[indivial_i, :] = [ 8. 8. 173. 181.]
290 cord_individual_obj[indivial_i, :] = [ 9. 8. 122. 130.]
291 cord_individual_obj[indivial_i, :] = [ 10. 7. 153. 160.]
292 cord_individual_obj[indivial_i, :] = [ 11. 8. 129. 137.]
293 cord_individual_obj[indivial_i, :] = [ 12. 10. 163. 173.]
294 cord_individual_obj[indivial_i, :] = [ 13. 8. 121. 129.]
295 cord_individual_obj[indivial_i, :] = [ 14. 8. 146. 154.]
296 cord_individual_obj[indivial_i, :] = [ 15. 9. 160. 169.]
297 cord_individual_obj[indivial_i, :] = [ 16. 9. 133. 142.]
298 cord_individual_obj[indivial_i, :] = [ 17. 8. 146. 154.]
299 cord_individual_obj[indivial_i, :] = [ 18. 9. 149. 158.]
300 cord_individual_obj[indivial_i, :] = [ 19. 7. 83. 90.]
301 cord_individual_obj[indivial_i, :] = [ 20. 10. 126. 136.]
302 cord_individual_obj[indivial_i, :] = [ 21. 10. 182. 192.]
303 cord_individual_obj[indivial_i, :] = [ 22. 9. 154. 163.]
304 cord_individual_obj[indivial_i, :] = [ 23. 10. 145. 155.]
305 cord_individual_obj[indivial_i, :] = [ 24. 7. 190. 197.]
306

307 min(cord_individual_obj[:, 3]) = 90.0
308 historl_G_best_iter[iter, 3] = 90.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0. 9. 139. 148.]
313 cord_individual_obj[indivial_i, :] = [ 1. 8. 154. 162.]
314 cord_individual_obj[indivial_i, :] = [ 2. 10. 114. 124.]
315 cord_individual_obj[indivial_i, :] = [ 3. 7. 158. 165.]
316 cord_individual_obj[indivial_i, :] = [ 4. 9. 147. 156.]
317 cord_individual_obj[indivial_i, :] = [ 5. 9. 185. 194.]
318 cord_individual_obj[indivial_i, :] = [ 6. 7. 83. 90.]
319 cord_individual_obj[indivial_i, :] = [ 7. 11. 119. 130.]
320 cord_individual_obj[indivial_i, :] = [ 8. 10. 78. 88.]
321 cord_individual_obj[indivial_i, :] = [ 9. 10. 144. 154.]
322 cord_individual_obj[indivial_i, :] = [ 10. 8. 217. 225.]
323 cord_individual_obj[indivial_i, :] = [ 11. 7. 157. 164.]
324 cord_individual_obj[indivial_i, :] = [ 12. 11. 121. 132.]
325 cord_individual_obj[indivial_i, :] = [ 13. 8. 151. 159.]
326 cord_individual_obj[indivial_i, :] = [ 14. 8. 144. 152.]
327 cord_individual_obj[indivial_i, :] = [ 15. 9. 126. 135.]
328 cord_individual_obj[indivial_i, :] = [ 16. 10. 196. 206.]
329 cord_individual_obj[indivial_i, :] = [ 17. 7. 115. 122.]
330 cord_individual_obj[indivial_i, :] = [ 18. 9. 167. 176.]
331 cord_individual_obj[indivial_i, :] = [ 19. 11. 113. 124.]

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332 cord_individual_obj[indivial_i, :] = [ 20. 7. 157. 164.]
333 cord_individual_obj[indivial_i, :] = [ 21. 9. 194. 203.]
334 cord_individual_obj[indivial_i, :] = [ 22. 10. 95. 105.]
335 cord_individual_obj[indivial_i, :] = [ 23. 8. 105. 113.]
336 cord_individual_obj[indivial_i, :] = [ 24. 9. 145. 154.]
337
338 min(cord_individual_obj[:, 3]) = 88.0
339 histol_G_best_iter[iter, 3] = 88.0
340 Begin iteration:
341
342 iter = 10
343 cord_individual_obj[indivial_i, :] = [ 0. 10. 197. 207.]
344 cord_individual_obj[indivial_i, :] = [ 1. 9. 164. 173.]
345 cord_individual_obj[indivial_i, :] = [ 2. 10. 153. 163.]
346 cord_individual_obj[indivial_i, :] = [ 3. 8. 116. 124.]
347 cord_individual_obj[indivial_i, :] = [ 4. 9. 132. 141.]
348 cord_individual_obj[indivial_i, :] = [ 5. 8. 156. 164.]
349 cord_individual_obj[indivial_i, :] = [ 6. 11. 147. 158.]
350 cord_individual_obj[indivial_i, :] = [ 7. 8. 210. 218.]
351 cord_individual_obj[indivial_i, :] = [ 8. 10. 190. 200.]
352 cord_individual_obj[indivial_i, :] = [ 9. 9. 147. 156.]
353 cord_individual_obj[indivial_i, :] = [10. 10. 78. 88.]
354 cord_individual_obj[indivial_i, :] = [11. 9. 134. 143.]
355 cord_individual_obj[indivial_i, :] = [12. 8. 107. 115.]
356 cord_individual_obj[indivial_i, :] = [13. 10. 134. 144.]
357 cord_individual_obj[indivial_i, :] = [14. 8. 158. 166.]
358 cord_individual_obj[indivial_i, :] = [15. 9. 125. 134.]
359 cord_individual_obj[indivial_i, :] = [16. 10. 128. 138.]
360 cord_individual_obj[indivial_i, :] = [17. 9. 185. 194.]
361 cord_individual_obj[indivial_i, :] = [18. 8. 115. 123.]
362 cord_individual_obj[indivial_i, :] = [19. 8. 98. 106.]
363 cord_individual_obj[indivial_i, :] = [20. 10. 103. 113.]
364 cord_individual_obj[indivial_i, :] = [21. 9. 191. 200.]
365 cord_individual_obj[indivial_i, :] = [22. 9. 115. 124.]
366 cord_individual_obj[indivial_i, :] = [23. 8. 122. 130.]
367 cord_individual_obj[indivial_i, :] = [24. 9. 120. 129.]
368
369 min(cord_individual_obj[:, 3]) = 88.0
370 histol_G_best_iter[iter, 3] = 88.0
371 Begin iteration:
372
373 iter = 11
374 cord_individual_obj[indivial_i, :] = [ 0. 10. 191. 201.]
375 cord_individual_obj[indivial_i, :] = [ 1. 9. 114. 123.]
376 cord_individual_obj[indivial_i, :] = [ 2. 9. 121. 130.]
377 cord_individual_obj[indivial_i, :] = [ 3. 9. 108. 117.]
378 cord_individual_obj[indivial_i, :] = [ 4. 8. 177. 185.]
379 cord_individual_obj[indivial_i, :] = [ 5. 9. 98. 107.]
380 cord_individual_obj[indivial_i, :] = [ 6. 10. 175. 185.]
381 cord_individual_obj[indivial_i, :] = [ 7. 10. 78. 88.]
382 cord_individual_obj[indivial_i, :] = [ 8. 10. 147. 157.]
383 cord_individual_obj[indivial_i, :] = [ 9. 8. 117. 125.]
384 cord_individual_obj[indivial_i, :] = [10. 8. 178. 186.]
385 cord_individual_obj[indivial_i, :] = [11. 7. 133. 140.]
386 cord_individual_obj[indivial_i, :] = [12. 7. 187. 194.]
387 cord_individual_obj[indivial_i, :] = [13. 8. 154. 162.]
388 cord_individual_obj[indivial_i, :] = [14. 7. 157. 164.]
389 cord_individual_obj[indivial_i, :] = [15. 7. 186. 193.]
390 cord_individual_obj[indivial_i, :] = [16. 7. 160. 167.]
391 cord_individual_obj[indivial_i, :] = [17. 7. 88. 95.]
392 cord_individual_obj[indivial_i, :] = [18. 9. 184. 193.]
393 cord_individual_obj[indivial_i, :] = [19. 7. 155. 162.]
394 cord_individual_obj[indivial_i, :] = [20. 11. 127. 138.]
395 cord_individual_obj[indivial_i, :] = [21. 8. 117. 125.]
396 cord_individual_obj[indivial_i, :] = [22. 10. 92. 102.]
397 cord_individual_obj[indivial_i, :] = [23. 11. 161. 172.]
398 cord_individual_obj[indivial_i, :] = [24. 8. 174. 182.]
399
400 min(cord_individual_obj[:, 3]) = 88.0
401 histol_G_best_iter[iter, 3] = 88.0
402 Begin iteration:
403
404 iter = 12
405 cord_individual_obj[indivial_i, :] = [ 0. 10. 78. 88.]
406 cord_individual_obj[indivial_i, :] = [ 1. 8. 175. 183.]
407 cord_individual_obj[indivial_i, :] = [ 2. 7. 129. 136.]
408 cord_individual_obj[indivial_i, :] = [ 3. 8. 143. 151.]
409 cord_individual_obj[indivial_i, :] = [ 4. 10. 129. 139.]
410 cord_individual_obj[indivial_i, :] = [ 5. 10. 177. 187.]
411 cord_individual_obj[indivial_i, :] = [ 6. 8. 205. 213.]
412 cord_individual_obj[indivial_i, :] = [ 7. 10. 118. 128.]
413 cord_individual_obj[indivial_i, :] = [ 8. 6. 116. 122.]
414 cord_individual_obj[indivial_i, :] = [ 9. 8. 110. 118.]
415 cord_individual_obj[indivial_i, :] = [10. 7. 154. 161.]

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416 cord_individual_obj[indivial_i,:] = [ 11. 9. 165. 174.]
417 cord_individual_obj[indivial_i,:] = [ 12. 7. 153. 160.]
418 cord_individual_obj[indivial_i,:] = [ 13. 8. 146. 154.]
419 cord_individual_obj[indivial_i,:] = [ 14. 12. 138. 150.]
420 cord_individual_obj[indivial_i,:] = [ 15. 8. 169. 177.]
421 cord_individual_obj[indivial_i,:] = [ 16. 10. 191. 201.]
422 cord_individual_obj[indivial_i,:] = [ 17. 9. 107. 116.]
423 cord_individual_obj[indivial_i,:] = [ 18. 7. 132. 139.]
424 cord_individual_obj[indivial_i,:] = [ 19. 9. 198. 207.]
425 cord_individual_obj[indivial_i,:] = [ 20. 9. 148. 157.]
426 cord_individual_obj[indivial_i,:] = [ 21. 8. 162. 170.]
427 cord_individual_obj[indivial_i,:] = [ 22. 12. 137. 149.]
428 cord_individual_obj[indivial_i,:] = [ 23. 10. 123. 133.]
429 cord_individual_obj[indivial_i,:] = [ 24. 7. 134. 141.]
430
431 min(cord_individual_obj[:,3]) = 88.0
432 histol_G_best_iter[iter,3] = 88.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [ 0. 10. 117. 127.]
437 cord_individual_obj[indivial_i,:] = [ 1. 8. 127. 135.]
438 cord_individual_obj[indivial_i,:] = [ 2. 11. 129. 140.]
439 cord_individual_obj[indivial_i,:] = [ 3. 8. 125. 133.]
440 cord_individual_obj[indivial_i,:] = [ 4. 10. 104. 114.]
441 cord_individual_obj[indivial_i,:] = [ 5. 8. 169. 177.]
442 cord_individual_obj[indivial_i,:] = [ 6. 10. 78. 88.]
443 cord_individual_obj[indivial_i,:] = [ 7. 10. 125. 135.]
444 cord_individual_obj[indivial_i,:] = [ 8. 9. 132. 141.]
445 cord_individual_obj[indivial_i,:] = [ 9. 10. 145. 155.]
446 cord_individual_obj[indivial_i,:] = [ 10. 7. 106. 113.]
447 cord_individual_obj[indivial_i,:] = [ 11. 10. 166. 176.]
448 cord_individual_obj[indivial_i,:] = [ 12. 8. 189. 197.]
449 cord_individual_obj[indivial_i,:] = [ 13. 10. 162. 172.]
450 cord_individual_obj[indivial_i,:] = [ 14. 7. 128. 135.]
451 cord_individual_obj[indivial_i,:] = [ 15. 8. 128. 136.]
452 cord_individual_obj[indivial_i,:] = [ 16. 7. 137. 144.]
453 cord_individual_obj[indivial_i,:] = [ 17. 9. 166. 175.]
454 cord_individual_obj[indivial_i,:] = [ 18. 9. 175. 184.]
455 cord_individual_obj[indivial_i,:] = [ 19. 11. 192. 203.]
456 cord_individual_obj[indivial_i,:] = [ 20. 9. 128. 137.]
457 cord_individual_obj[indivial_i,:] = [ 21. 8. 205. 213.]
458 cord_individual_obj[indivial_i,:] = [ 22. 10. 126. 136.]
459 cord_individual_obj[indivial_i,:] = [ 23. 8. 119. 127.]
460 cord_individual_obj[indivial_i,:] = [ 24. 11. 103. 114.]
461
462 min(cord_individual_obj[:,3]) = 88.0
463 histol_G_best_iter[iter,3] = 88.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [ 0. 8. 145. 153.]
468 cord_individual_obj[indivial_i,:] = [ 1. 8. 125. 133.]
469 cord_individual_obj[indivial_i,:] = [ 2. 10. 123. 133.]
470 cord_individual_obj[indivial_i,:] = [ 3. 8. 184. 192.]
471 cord_individual_obj[indivial_i,:] = [ 4. 9. 119. 128.]
472 cord_individual_obj[indivial_i,:] = [ 5. 8. 102. 110.]
473 cord_individual_obj[indivial_i,:] = [ 6. 10. 148. 158.]
474 cord_individual_obj[indivial_i,:] = [ 7. 11. 143. 154.]
475 cord_individual_obj[indivial_i,:] = [ 8. 7. 118. 125.]
476 cord_individual_obj[indivial_i,:] = [ 9. 7. 104. 111.]
477 cord_individual_obj[indivial_i,:] = [ 10. 9. 212. 221.]
478 cord_individual_obj[indivial_i,:] = [ 11. 9. 100. 109.]
479 cord_individual_obj[indivial_i,:] = [ 12. 7. 153. 160.]
480 cord_individual_obj[indivial_i,:] = [ 13. 10. 145. 155.]
481 cord_individual_obj[indivial_i,:] = [ 14. 8. 128. 136.]
482 cord_individual_obj[indivial_i,:] = [ 15. 9. 196. 205.]
483 cord_individual_obj[indivial_i,:] = [ 16. 9. 121. 130.]
484 cord_individual_obj[indivial_i,:] = [ 17. 7. 133. 140.]
485 cord_individual_obj[indivial_i,:] = [ 18. 11. 157. 168.]
486 cord_individual_obj[indivial_i,:] = [ 19. 9. 154. 163.]
487 cord_individual_obj[indivial_i,:] = [ 20. 8. 118. 126.]
488 cord_individual_obj[indivial_i,:] = [ 21. 10. 78. 88.]
489 cord_individual_obj[indivial_i,:] = [ 22. 9. 155. 164.]
490 cord_individual_obj[indivial_i,:] = [ 23. 11. 150. 161.]
491 cord_individual_obj[indivial_i,:] = [ 24. 9. 139. 148.]
492
493 min(cord_individual_obj[:,3]) = 88.0
494 histol_G_best_iter[iter,3] = 88.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [ 0. 9. 152. 161.]
499 cord_individual_obj[indivial_i,:] = [ 1. 9. 172. 181.]

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500 cord_individual_obj[indivial_i,:] = [ 2. 7. 100. 107.]
501 cord_individual_obj[indivial_i,:] = [ 3. 7. 109. 116.]
502 cord_individual_obj[indivial_i,:] = [ 4. 10. 182. 192.]
503 cord_individual_obj[indivial_i,:] = [ 5. 8. 155. 163.]
504 cord_individual_obj[indivial_i,:] = [ 6. 9. 187. 196.]
505 cord_individual_obj[indivial_i,:] = [ 7. 9. 114. 123.]
506 cord_individual_obj[indivial_i,:] = [ 8. 9. 142. 151.]
507 cord_individual_obj[indivial_i,:] = [ 9. 10. 108. 118.]
508 cord_individual_obj[indivial_i,:] = [10. 10. 78. 88.]
509 cord_individual_obj[indivial_i,:] = [11. 10. 249. 259.]
510 cord_individual_obj[indivial_i,:] = [12. 7. 159. 166.]
511 cord_individual_obj[indivial_i,:] = [13. 8. 151. 159.]
512 cord_individual_obj[indivial_i,:] = [14. 9. 149. 158.]
513 cord_individual_obj[indivial_i,:] = [15. 11. 153. 164.]
514 cord_individual_obj[indivial_i,:] = [16. 12. 131. 143.]
515 cord_individual_obj[indivial_i,:] = [17. 6. 136. 142.]
516 cord_individual_obj[indivial_i,:] = [18. 7. 158. 165.]
517 cord_individual_obj[indivial_i,:] = [19. 10. 139. 149.]
518 cord_individual_obj[indivial_i,:] = [20. 7. 156. 163.]
519 cord_individual_obj[indivial_i,:] = [21. 9. 211. 220.]
520 cord_individual_obj[indivial_i,:] = [22. 10. 152. 162.]
521 cord_individual_obj[indivial_i,:] = [23. 9. 171. 180.]
522 cord_individual_obj[indivial_i,:] = [24. 9. 130. 139.]
523
524 min(cord_individual_obj[:, 3]) = 88.0
525 histol_G_best_iter[iter, 3] = 88.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i,:] = [ 0. 9. 193. 202.]
530 cord_individual_obj[indivial_i,:] = [ 1. 9. 138. 147.]
531 cord_individual_obj[indivial_i,:] = [ 2. 9. 116. 125.]
532 cord_individual_obj[indivial_i,:] = [ 3. 9. 95. 104.]
533 cord_individual_obj[indivial_i,:] = [ 4. 9. 98. 107.]
534 cord_individual_obj[indivial_i,:] = [ 5. 9. 88. 97.]
535 cord_individual_obj[indivial_i,:] = [ 6. 10. 187. 197.]
536 cord_individual_obj[indivial_i,:] = [ 7. 12. 170. 182.]
537 cord_individual_obj[indivial_i,:] = [ 8. 10. 143. 153.]
538 cord_individual_obj[indivial_i,:] = [ 9. 10. 144. 154.]
539 cord_individual_obj[indivial_i,:] = [10. 8. 158. 166.]
540 cord_individual_obj[indivial_i,:] = [11. 10. 78. 88.]
541 cord_individual_obj[indivial_i,:] = [12. 9. 150. 159.]
542 cord_individual_obj[indivial_i,:] = [13. 7. 159. 166.]
543 cord_individual_obj[indivial_i,:] = [14. 10. 142. 152.]
544 cord_individual_obj[indivial_i,:] = [15. 8. 219. 227.]
545 cord_individual_obj[indivial_i,:] = [16. 9. 148. 157.]
546 cord_individual_obj[indivial_i,:] = [17. 9. 109. 118.]
547 cord_individual_obj[indivial_i,:] = [18. 7. 168. 175.]
548 cord_individual_obj[indivial_i,:] = [19. 10. 213. 223.]
549 cord_individual_obj[indivial_i,:] = [20. 9. 128. 137.]
550 cord_individual_obj[indivial_i,:] = [21. 9. 186. 195.]
551 cord_individual_obj[indivial_i,:] = [22. 11. 119. 130.]
552 cord_individual_obj[indivial_i,:] = [23. 8. 154. 162.]
553 cord_individual_obj[indivial_i,:] = [24. 8. 166. 174.]
554
555 min(cord_individual_obj[:, 3]) = 88.0
556 histol_G_best_iter[iter, 3] = 88.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i,:] = [ 0. 9. 164. 173.]
561 cord_individual_obj[indivial_i,:] = [ 1. 10. 139. 149.]
562 cord_individual_obj[indivial_i,:] = [ 2. 10. 153. 163.]
563 cord_individual_obj[indivial_i,:] = [ 3. 7. 118. 125.]
564 cord_individual_obj[indivial_i,:] = [ 4. 10. 132. 142.]
565 cord_individual_obj[indivial_i,:] = [ 5. 10. 113. 123.]
566 cord_individual_obj[indivial_i,:] = [ 6. 10. 161. 171.]
567 cord_individual_obj[indivial_i,:] = [ 7. 9. 156. 165.]
568 cord_individual_obj[indivial_i,:] = [ 8. 8. 145. 153.]
569 cord_individual_obj[indivial_i,:] = [ 9. 10. 111. 121.]
570 cord_individual_obj[indivial_i,:] = [10. 9. 143. 152.]
571 cord_individual_obj[indivial_i,:] = [11. 9. 126. 135.]
572 cord_individual_obj[indivial_i,:] = [12. 8. 125. 133.]
573 cord_individual_obj[indivial_i,:] = [13. 10. 175. 185.]
574 cord_individual_obj[indivial_i,:] = [14. 9. 145. 154.]
575 cord_individual_obj[indivial_i,:] = [15. 10. 78. 88.]
576 cord_individual_obj[indivial_i,:] = [16. 9. 150. 159.]
577 cord_individual_obj[indivial_i,:] = [17. 11. 137. 148.]
578 cord_individual_obj[indivial_i,:] = [18. 10. 148. 158.]
579 cord_individual_obj[indivial_i,:] = [19. 9. 159. 168.]
580 cord_individual_obj[indivial_i,:] = [20. 10. 135. 145.]
581 cord_individual_obj[indivial_i,:] = [21. 9. 213. 222.]
582 cord_individual_obj[indivial_i,:] = [22. 9. 139. 148.]
583 cord_individual_obj[indivial_i,:] = [23. 11. 139. 150.]

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584     cord_individual_obj[indivial_i, :] = [ 24. 10. 149. 159.]
585
586     min(cord_individual_obj[:, 3]) = 88.0
587     historl_G_best_iter[iter, 3] = 88.0
588 Begin iteration:
589
590 iter = 18
591     cord_individual_obj[indivial_i, :] = [ 0. 9. 130. 139.]
592     cord_individual_obj[indivial_i, :] = [ 1. 10. 132. 142.]
593     cord_individual_obj[indivial_i, :] = [ 2. 10. 116. 126.]
594     cord_individual_obj[indivial_i, :] = [ 3. 8. 139. 147.]
595     cord_individual_obj[indivial_i, :] = [ 4. 11. 122. 133.]
596     cord_individual_obj[indivial_i, :] = [ 5. 8. 130. 138.]
597     cord_individual_obj[indivial_i, :] = [ 6. 13. 152. 165.]
598     cord_individual_obj[indivial_i, :] = [ 7. 10. 169. 179.]
599     cord_individual_obj[indivial_i, :] = [ 8. 9. 142. 151.]
600     cord_individual_obj[indivial_i, :] = [ 9. 8. 116. 124.]
601     cord_individual_obj[indivial_i, :] = [ 10. 9. 100. 109.]
602     cord_individual_obj[indivial_i, :] = [ 11. 8. 166. 174.]
603     cord_individual_obj[indivial_i, :] = [ 12. 7. 168. 175.]
604     cord_individual_obj[indivial_i, :] = [ 13. 10. 105. 115.]
605     cord_individual_obj[indivial_i, :] = [ 14. 8. 132. 140.]
606     cord_individual_obj[indivial_i, :] = [ 15. 11. 100. 111.]
607     cord_individual_obj[indivial_i, :] = [ 16. 10. 123. 133.]
608     cord_individual_obj[indivial_i, :] = [ 17. 9. 65. 74.]
609     cord_individual_obj[indivial_i, :] = [ 18. 9. 147. 156.]
610     cord_individual_obj[indivial_i, :] = [ 19. 10. 161. 171.]
611     cord_individual_obj[indivial_i, :] = [ 20. 10. 128. 138.]
612     cord_individual_obj[indivial_i, :] = [ 21. 10. 78. 88.]
613     cord_individual_obj[indivial_i, :] = [ 22. 10. 166. 176.]
614     cord_individual_obj[indivial_i, :] = [ 23. 9. 167. 176.]
615     cord_individual_obj[indivial_i, :] = [ 24. 9. 202. 211.]
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. 10. 144. 154.]
623     cord_individual_obj[indivial_i, :] = [ 1. 8. 120. 128.]
624     cord_individual_obj[indivial_i, :] = [ 2. 9. 115. 124.]
625     cord_individual_obj[indivial_i, :] = [ 3. 7. 126. 133.]
626     cord_individual_obj[indivial_i, :] = [ 4. 11. 170. 181.]
627     cord_individual_obj[indivial_i, :] = [ 5. 7. 126. 133.]
628     cord_individual_obj[indivial_i, :] = [ 6. 9. 160. 169.]
629     cord_individual_obj[indivial_i, :] = [ 7. 8. 147. 155.]
630     cord_individual_obj[indivial_i, :] = [ 8. 10. 105. 115.]
631     cord_individual_obj[indivial_i, :] = [ 9. 9. 202. 211.]
632     cord_individual_obj[indivial_i, :] = [ 10. 11. 150. 161.]
633     cord_individual_obj[indivial_i, :] = [ 11. 7. 190. 197.]
634     cord_individual_obj[indivial_i, :] = [ 12. 8. 164. 172.]
635     cord_individual_obj[indivial_i, :] = [ 13. 11. 150. 161.]
636     cord_individual_obj[indivial_i, :] = [ 14. 9. 108. 117.]
637     cord_individual_obj[indivial_i, :] = [ 15. 10. 156. 166.]
638     cord_individual_obj[indivial_i, :] = [ 16. 9. 160. 169.]
639     cord_individual_obj[indivial_i, :] = [ 17. 9. 135. 144.]
640     cord_individual_obj[indivial_i, :] = [ 18. 8. 146. 154.]
641     cord_individual_obj[indivial_i, :] = [ 19. 12. 172. 184.]
642     cord_individual_obj[indivial_i, :] = [ 20. 9. 141. 150.]
643     cord_individual_obj[indivial_i, :] = [ 21. 10. 138. 148.]
644     cord_individual_obj[indivial_i, :] = [ 22. 10. 114. 124.]
645     cord_individual_obj[indivial_i, :] = [ 23. 9. 155. 164.]
646     cord_individual_obj[indivial_i, :] = [ 24. 9. 65. 74.]
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. 11. 182. 193.]
654     cord_individual_obj[indivial_i, :] = [ 1. 8. 120. 128.]
655     cord_individual_obj[indivial_i, :] = [ 2. 7. 112. 119.]
656     cord_individual_obj[indivial_i, :] = [ 3. 7. 176. 183.]
657     cord_individual_obj[indivial_i, :] = [ 4. 10. 172. 182.]
658     cord_individual_obj[indivial_i, :] = [ 5. 8. 132. 140.]
659     cord_individual_obj[indivial_i, :] = [ 6. 9. 139. 148.]
660     cord_individual_obj[indivial_i, :] = [ 7. 10. 165. 175.]
661     cord_individual_obj[indivial_i, :] = [ 8. 9. 107. 116.]
662     cord_individual_obj[indivial_i, :] = [ 9. 9. 65. 74.]
663     cord_individual_obj[indivial_i, :] = [ 10. 10. 178. 188.]
664     cord_individual_obj[indivial_i, :] = [ 11. 11. 145. 156.]
665     cord_individual_obj[indivial_i, :] = [ 12. 9. 202. 211.]
666     cord_individual_obj[indivial_i, :] = [ 13. 11. 150. 161.]
667     cord_individual_obj[indivial_i, :] = [ 14. 8. 121. 129.]

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668 cord_individual_obj[indivial_i,:] = [ 15. 11. 156. 167.]
669 cord_individual_obj[indivial_i,:] = [ 16. 9. 156. 165.]
670 cord_individual_obj[indivial_i,:] = [ 17. 8. 163. 171.]
671 cord_individual_obj[indivial_i,:] = [ 18. 10. 166. 176.]
672 cord_individual_obj[indivial_i,:] = [ 19. 11. 154. 165.]
673 cord_individual_obj[indivial_i,:] = [ 20. 8. 143. 151.]
674 cord_individual_obj[indivial_i,:] = [ 21. 10. 144. 154.]
675 cord_individual_obj[indivial_i,:] = [ 22. 9. 109. 118.]
676 cord_individual_obj[indivial_i,:] = [ 23. 11. 128. 139.]
677 cord_individual_obj[indivial_i,:] = [ 24. 10. 142. 152.]
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 = 224.0
689 Proportion_of_area = 0.2074074074074074
690 BEST_CHROM =
691 berth: [24.5 2. 10. 16.5 23. 8.5 16. 9. 7.5 2.5 3.5 3.5 17. 12.
692 23.]
693 time: [0. 6. 0. 1. 2. 1. 3. 3. 6. 2. 0. 4. 0. 1. 4.]
694 num_QC: [2. 2. 4. 4. 4. 3. 3. 4. 4. 4. 4. 4. 3. 2. 3.]
695 Objective function values and some other indicators:
696 Obj0 = 9.00          Obj1 = 65.00          Obj0 + Obj1 = 74.00
697 Total movement of crane: 0.00
698 Total waiting time in berth position: 33.00
699 Total index of q during berthing: 848.00
700 Specific arrangement for each vessel:
701 V_id: 0      li: 7.0           xi: 24.5           bow of i: 21.0           tail of i: 28.0           gama_i0: 0.0           gama_i1: 1
702 .0          gama_i1 + 1: 2.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 60.0           work
703 load_i: 60.0           work load gap_i: 0
704 V_id: 1      li: 4.0           xi: 2.0            bow of i: 0.0           tail of i: 4.0           gama_i0: 6.0           gama_i1: 9.0
705 .0          gama_i1 + 1: 10.0  gama_i1 - gama_i0: 3.0           duration_time_i: 4.0           demand_i: 160.0          work
706 load_i: 160.0           work load gap_i: 0
707 V_id: 2      li: 6.0           xi: 10.0           bow of i: 7.0           tail of i: 13.0           gama_i0: 0.0           gama_i1: 0
708 .0          gama_i1 + 1: 1.0   gama_i1 - gama_i0: 0.0           duration_time_i: 1.0           demand_i: 80.0           work
709 load_i: 80.0           work load gap_i: 0
710 V_id: 3      li: 5.0           xi: 16.5           bow of i: 14.0           tail of i: 19.0           gama_i0: 1.0           gama_i1: 2
711 .0          gama_i1 + 1: 3.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 160.0          work
712 load_i: 160.0           work load gap_i: 0
713 V_id: 4      li: 8.0           xi: 23.0           bow of i: 19.0           tail of i: 27.0           gama_i0: 2.0           gama_i1: 3
714 .0          gama_i1 + 1: 4.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 160.0          work
715 load_i: 160.0           work load gap_i: 0
716 V_id: 5      li: 3.0           xi: 8.5            bow of i: 7.0           tail of i: 10.0           gama_i0: 1.0           gama_i1: 2.0
717 .0          gama_i1 + 1: 3.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 120.0          work load_i:
718 load_i: 120.0           work load gap_i: 0
719 V_id: 6      li: 6.0           xi: 16.0           bow of i: 13.0           tail of i: 19.0           gama_i0: 3.0           gama_i1: 5
720 .0          gama_i1 + 1: 6.0   gama_i1 - gama_i0: 2.0           duration_time_i: 3.0           demand_i: 160.0          work
721 load_i: 160.0           work load gap_i: 0
722 V_id: 7      li: 8.0           xi: 9.0            bow of i: 5.0           tail of i: 13.0           gama_i0: 3.0           gama_i1: 3.0
723 .0          gama_i1 + 1: 4.0   gama_i1 - gama_i0: 0.0           duration_time_i: 1.0           demand_i: 80.0           work load_i:
724 load_i: 80.0           work load gap_i: 0
725 V_id: 8      li: 7.0           xi: 7.5            bow of i: 4.0           tail of i: 11.0           gama_i0: 6.0           gama_i1: 7.0
726 .0          gama_i1 + 1: 8.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 140.0          work load_i:
727 load_i: 140.0           work load gap_i: 0
728 V_id: 9      li: 5.0           xi: 2.5            bow of i: 0.0           tail of i: 5.0           gama_i0: 2.0           gama_i1: 3.0
729 .0          gama_i1 + 1: 4.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 140.0          work load_i:
730 load_i: 140.0           work load gap_i: 0
731 V_id: 10     li: 7.0           xi: 3.5            bow of i: 0.0           tail of i: 7.0           gama_i0: 0.0           gama_i1: 1.0
732 .0          gama_i1 + 1: 2.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 140.0          work load_i:
733 load_i: 140.0           work load gap_i: 0
734 V_id: 11     li: 7.0           xi: 3.5            bow of i: 0.0           tail of i: 7.0           gama_i0: 4.0           gama_i1: 5.0
735 .0          gama_i1 + 1: 6.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 100.0          work load_i:
736 load_i: 100.0           work load gap_i: 0
737 V_id: 12     li: 8.0           xi: 17.0           bow of i: 13.0           tail of i: 21.0           gama_i0: 0.0           gama_i1: 1
738 .0          gama_i1 + 1: 1.0   gama_i1 - gama_i0: 0.0           duration_time_i: 1.0           demand_i: 60.0           work
739 load_i: 60.0           work load gap_i: 0
740 V_id: 13     li: 4.0           xi: 12.0           bow of i: 10.0           tail of i: 14.0           gama_i0: 1.0           gama_i1: 1
741 .0          gama_i1 + 1: 3.0   gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 60.0           work
742 load_i: 60.0           work load gap_i: 0
743 V_id: 14     li: 8.0           xi: 23.0           bow of i: 19.0           tail of i: 27.0           gama_i0: 4.0           gama_i1: 1
744 .0          gama_i1 + 1: 7.0   gama_i1 - gama_i0: 2.0           duration_time_i: 3.0           demand_i: 140.0          work
745 load_i: 140.0           work load gap_i: 0
746
747 Algorithm finished and the total CPU time: 452 s
748 End
749

```