

unknown

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80     cord_individual_obj[indivial_i,:] = [ 16. 10. 128. 138.]
81     cord_individual_obj[indivial_i,:] = [ 17. 10. 107. 117.]
82     cord_individual_obj[indivial_i,:] = [ 18. 14. 195. 209.]
83     cord_individual_obj[indivial_i,:] = [ 19. 11. 94. 105.]
84     cord_individual_obj[indivial_i,:] = [ 20. 11. 138. 149.]
85     cord_individual_obj[indivial_i,:] = [ 21. 12. 90. 102.]
86     cord_individual_obj[indivial_i,:] = [ 22. 10. 139. 149.]
87     cord_individual_obj[indivial_i,:] = [ 23. 11. 125. 136.]
88     cord_individual_obj[indivial_i,:] = [ 24. 11. 148. 159.]
89
90 min(cord_individual_obj[:,3]) = 92.0
91 historl_G_best_iter[iter, 3] = 92.0
92 Begin iteration:
93
94 iter = 2
95     cord_individual_obj[indivial_i,:] = [ 0. 10. 101. 111.]
96     cord_individual_obj[indivial_i,:] = [ 1. 12. 99. 111.]
97     cord_individual_obj[indivial_i,:] = [ 2. 11. 146. 157.]
98     cord_individual_obj[indivial_i,:] = [ 3. 10. 143. 153.]
99     cord_individual_obj[indivial_i,:] = [ 4. 10. 140. 150.]
100    cord_individual_obj[indivial_i,:] = [ 5. 9. 123. 132.]
101    cord_individual_obj[indivial_i,:] = [ 6. 11. 132. 143.]
102    cord_individual_obj[indivial_i,:] = [ 7. 9. 165. 174.]
103    cord_individual_obj[indivial_i,:] = [ 8. 11. 189. 200.]
104    cord_individual_obj[indivial_i,:] = [ 9. 12. 226. 238.]
105    cord_individual_obj[indivial_i,:] = [ 10. 11. 144. 155.]
106    cord_individual_obj[indivial_i,:] = [ 11. 10. 148. 158.]
107    cord_individual_obj[indivial_i,:] = [ 12. 11. 161. 172.]
108    cord_individual_obj[indivial_i,:] = [ 13. 10. 126. 136.]
109    cord_individual_obj[indivial_i,:] = [ 14. 11. 154. 165.]
110    cord_individual_obj[indivial_i,:] = [ 15. 11. 145. 156.]
111    cord_individual_obj[indivial_i,:] = [ 16. 9. 98. 107.]
112    cord_individual_obj[indivial_i,:] = [ 17. 10. 143. 153.]
113    cord_individual_obj[indivial_i,:] = [ 18. 11. 81. 92.]
114    cord_individual_obj[indivial_i,:] = [ 19. 10. 200. 210.]
115    cord_individual_obj[indivial_i,:] = [ 20. 10. 144. 154.]
116    cord_individual_obj[indivial_i,:] = [ 21. 9. 126. 135.]
117    cord_individual_obj[indivial_i,:] = [ 22. 12. 194. 206.]
118    cord_individual_obj[indivial_i,:] = [ 23. 12. 163. 175.]
119    cord_individual_obj[indivial_i,:] = [ 24. 13. 123. 136.]
120
121 min(cord_individual_obj[:,3]) = 92.0
122 historl_G_best_iter[iter, 3] = 92.0
123 Begin iteration:
124
125 iter = 3
126     cord_individual_obj[indivial_i,:] = [ 0. 10. 92. 102.]
127     cord_individual_obj[indivial_i,:] = [ 1. 11. 115. 126.]
128     cord_individual_obj[indivial_i,:] = [ 2. 12. 141. 153.]
129     cord_individual_obj[indivial_i,:] = [ 3. 12. 109. 121.]
130     cord_individual_obj[indivial_i,:] = [ 4. 11. 149. 160.]
131     cord_individual_obj[indivial_i,:] = [ 5. 10. 146. 156.]
132     cord_individual_obj[indivial_i,:] = [ 6. 11. 144. 155.]
133     cord_individual_obj[indivial_i,:] = [ 7. 12. 137. 149.]
134     cord_individual_obj[indivial_i,:] = [ 8. 12. 183. 195.]
135     cord_individual_obj[indivial_i,:] = [ 9. 11. 81. 92.]
136     cord_individual_obj[indivial_i,:] = [ 10. 12. 126. 138.]
137     cord_individual_obj[indivial_i,:] = [ 11. 10. 124. 134.]
138     cord_individual_obj[indivial_i,:] = [ 12. 12. 172. 184.]
139     cord_individual_obj[indivial_i,:] = [ 13. 10. 167. 177.]
140     cord_individual_obj[indivial_i,:] = [ 14. 10. 140. 150.]
141     cord_individual_obj[indivial_i,:] = [ 15. 12. 173. 185.]
142     cord_individual_obj[indivial_i,:] = [ 16. 11. 167. 178.]
143     cord_individual_obj[indivial_i,:] = [ 17. 10. 107. 117.]
144     cord_individual_obj[indivial_i,:] = [ 18. 11. 107. 118.]
145     cord_individual_obj[indivial_i,:] = [ 19. 10. 137. 147.]
146     cord_individual_obj[indivial_i,:] = [ 20. 10. 128. 138.]
147     cord_individual_obj[indivial_i,:] = [ 21. 12. 161. 173.]
148     cord_individual_obj[indivial_i,:] = [ 22. 11. 209. 220.]
149     cord_individual_obj[indivial_i,:] = [ 23. 11. 109. 120.]
150     cord_individual_obj[indivial_i,:] = [ 24. 14. 188. 202.]
151
152 min(cord_individual_obj[:,3]) = 92.0
153 historl_G_best_iter[iter, 3] = 92.0
154 Begin iteration:
155
156 iter = 4
157     cord_individual_obj[indivial_i,:] = [ 0. 11. 198. 209.]
158     cord_individual_obj[indivial_i,:] = [ 1. 10. 118. 128.]
159     cord_individual_obj[indivial_i,:] = [ 2. 12. 115. 127.]
160     cord_individual_obj[indivial_i,:] = [ 3. 12. 129. 141.]
161     cord_individual_obj[indivial_i,:] = [ 4. 10. 186. 196.]
162     cord_individual_obj[indivial_i,:] = [ 5. 10. 125. 135.]
163     cord_individual_obj[indivial_i,:] = [ 6. 11. 144. 155.]

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164 cord_individual_obj[indivial_i, :] = [ 7. 12. 145. 157.]
165 cord_individual_obj[indivial_i, :] = [ 8. 12. 188. 200.]
166 cord_individual_obj[indivial_i, :] = [ 9. 12. 176. 188.]
167 cord_individual_obj[indivial_i, :] = [ 10. 11. 146. 157.]
168 cord_individual_obj[indivial_i, :] = [ 11. 9. 129. 138.]
169 cord_individual_obj[indivial_i, :] = [ 12. 12. 136. 148.]
170 cord_individual_obj[indivial_i, :] = [ 13. 8. 115. 123.]
171 cord_individual_obj[indivial_i, :] = [ 14. 10. 167. 177.]
172 cord_individual_obj[indivial_i, :] = [ 15. 11. 143. 154.]
173 cord_individual_obj[indivial_i, :] = [ 16. 12. 154. 166.]
174 cord_individual_obj[indivial_i, :] = [ 17. 10. 114. 124.]
175 cord_individual_obj[indivial_i, :] = [ 18. 11. 154. 165.]
176 cord_individual_obj[indivial_i, :] = [ 19. 13. 133. 146.]
177 cord_individual_obj[indivial_i, :] = [ 20. 10. 125. 135.]
178 cord_individual_obj[indivial_i, :] = [ 21. 11. 104. 115.]
179 cord_individual_obj[indivial_i, :] = [ 22. 11. 81. 92.]
180 cord_individual_obj[indivial_i, :] = [ 23. 11. 124. 135.]
181 cord_individual_obj[indivial_i, :] = [ 24. 11. 129. 140.]
182
183 min(cord_individual_obj[:, 3]) = 92.0
184 historl_G_best_iter[iter, 3] = 92.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i, :] = [ 0. 11. 81. 92.]
189 cord_individual_obj[indivial_i, :] = [ 1. 9. 164. 173.]
190 cord_individual_obj[indivial_i, :] = [ 2. 14. 213. 227.]
191 cord_individual_obj[indivial_i, :] = [ 3. 11. 126. 137.]
192 cord_individual_obj[indivial_i, :] = [ 4. 11. 89. 100.]
193 cord_individual_obj[indivial_i, :] = [ 5. 12. 116. 128.]
194 cord_individual_obj[indivial_i, :] = [ 6. 11. 125. 136.]
195 cord_individual_obj[indivial_i, :] = [ 7. 11. 132. 143.]
196 cord_individual_obj[indivial_i, :] = [ 8. 11. 122. 133.]
197 cord_individual_obj[indivial_i, :] = [ 9. 11. 178. 189.]
198 cord_individual_obj[indivial_i, :] = [ 10. 13. 136. 149.]
199 cord_individual_obj[indivial_i, :] = [ 11. 11. 113. 124.]
200 cord_individual_obj[indivial_i, :] = [ 12. 10. 134. 144.]
201 cord_individual_obj[indivial_i, :] = [ 13. 9. 124. 133.]
202 cord_individual_obj[indivial_i, :] = [ 14. 11. 161. 172.]
203 cord_individual_obj[indivial_i, :] = [ 15. 12. 115. 127.]
204 cord_individual_obj[indivial_i, :] = [ 16. 10. 132. 142.]
205 cord_individual_obj[indivial_i, :] = [ 17. 9. 142. 151.]
206 cord_individual_obj[indivial_i, :] = [ 18. 13. 126. 139.]
207 cord_individual_obj[indivial_i, :] = [ 19. 11. 151. 162.]
208 cord_individual_obj[indivial_i, :] = [ 20. 11. 183. 194.]
209 cord_individual_obj[indivial_i, :] = [ 21. 11. 146. 157.]
210 cord_individual_obj[indivial_i, :] = [ 22. 10. 137. 147.]
211 cord_individual_obj[indivial_i, :] = [ 23. 10. 117. 127.]
212 cord_individual_obj[indivial_i, :] = [ 24. 11. 157. 168.]
213
214 min(cord_individual_obj[:, 3]) = 92.0
215 historl_G_best_iter[iter, 3] = 92.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i, :] = [ 0. 11. 140. 151.]
220 cord_individual_obj[indivial_i, :] = [ 1. 12. 116. 128.]
221 cord_individual_obj[indivial_i, :] = [ 2. 11. 81. 92.]
222 cord_individual_obj[indivial_i, :] = [ 3. 10. 133. 143.]
223 cord_individual_obj[indivial_i, :] = [ 4. 10. 98. 108.]
224 cord_individual_obj[indivial_i, :] = [ 5. 10. 151. 161.]
225 cord_individual_obj[indivial_i, :] = [ 6. 10. 130. 140.]
226 cord_individual_obj[indivial_i, :] = [ 7. 10. 113. 123.]
227 cord_individual_obj[indivial_i, :] = [ 8. 11. 165. 176.]
228 cord_individual_obj[indivial_i, :] = [ 9. 12. 188. 200.]
229 cord_individual_obj[indivial_i, :] = [ 10. 11. 188. 199.]
230 cord_individual_obj[indivial_i, :] = [ 11. 10. 112. 122.]
231 cord_individual_obj[indivial_i, :] = [ 12. 11. 182. 193.]
232 cord_individual_obj[indivial_i, :] = [ 13. 9. 141. 150.]
233 cord_individual_obj[indivial_i, :] = [ 14. 9. 190. 199.]
234 cord_individual_obj[indivial_i, :] = [ 15. 10. 139. 149.]
235 cord_individual_obj[indivial_i, :] = [ 16. 12. 119. 131.]
236 cord_individual_obj[indivial_i, :] = [ 17. 11. 138. 149.]
237 cord_individual_obj[indivial_i, :] = [ 18. 12. 182. 194.]
238 cord_individual_obj[indivial_i, :] = [ 19. 11. 106. 117.]
239 cord_individual_obj[indivial_i, :] = [ 20. 13. 151. 164.]
240 cord_individual_obj[indivial_i, :] = [ 21. 11. 110. 121.]
241 cord_individual_obj[indivial_i, :] = [ 22. 11. 138. 149.]
242 cord_individual_obj[indivial_i, :] = [ 23. 12. 200. 212.]
243 cord_individual_obj[indivial_i, :] = [ 24. 12. 138. 150.]
244
245 min(cord_individual_obj[:, 3]) = 92.0
246 historl_G_best_iter[iter, 3] = 92.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0. 11. 177. 188.]
251 cord_individual_obj[indivial_i, :] = [ 1. 12. 162. 174.]
252 cord_individual_obj[indivial_i, :] = [ 2. 12. 198. 210.]
253 cord_individual_obj[indivial_i, :] = [ 3. 12. 143. 155.]
254 cord_individual_obj[indivial_i, :] = [ 4. 10. 153. 163.]
255 cord_individual_obj[indivial_i, :] = [ 5. 11. 120. 131.]
256 cord_individual_obj[indivial_i, :] = [ 6. 10. 112. 122.]
257 cord_individual_obj[indivial_i, :] = [ 7. 11. 206. 217.]
258 cord_individual_obj[indivial_i, :] = [ 8. 14. 122. 136.]
259 cord_individual_obj[indivial_i, :] = [ 9. 12. 111. 123.]
260 cord_individual_obj[indivial_i, :] = [ 10. 11. 156. 167.]
261 cord_individual_obj[indivial_i, :] = [ 11. 12. 121. 133.]
262 cord_individual_obj[indivial_i, :] = [ 12. 13. 118. 131.]
263 cord_individual_obj[indivial_i, :] = [ 13. 8. 132. 140.]
264 cord_individual_obj[indivial_i, :] = [ 14. 10. 201. 211.]
265 cord_individual_obj[indivial_i, :] = [ 15. 12. 118. 130.]
266 cord_individual_obj[indivial_i, :] = [ 16. 10. 137. 147.]
267 cord_individual_obj[indivial_i, :] = [ 17. 9. 124. 133.]
268 cord_individual_obj[indivial_i, :] = [ 18. 12. 106. 118.]
269 cord_individual_obj[indivial_i, :] = [ 19. 10. 140. 150.]
270 cord_individual_obj[indivial_i, :] = [ 20. 9. 120. 129.]
271 cord_individual_obj[indivial_i, :] = [ 21. 15. 153. 168.]
272 cord_individual_obj[indivial_i, :] = [ 22. 11. 124. 135.]
273 cord_individual_obj[indivial_i, :] = [ 23. 11. 81. 92.]
274 cord_individual_obj[indivial_i, :] = [ 24. 12. 151. 163.]
275

276 min(cord_individual_obj[:, 3]) = 92.0
277 historl_G_best_iter[iter, 3] = 92.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0. 11. 175. 186.]
282 cord_individual_obj[indivial_i, :] = [ 1. 10. 124. 134.]
283 cord_individual_obj[indivial_i, :] = [ 2. 11. 197. 208.]
284 cord_individual_obj[indivial_i, :] = [ 3. 12. 182. 194.]
285 cord_individual_obj[indivial_i, :] = [ 4. 10. 158. 168.]
286 cord_individual_obj[indivial_i, :] = [ 5. 11. 142. 153.]
287 cord_individual_obj[indivial_i, :] = [ 6. 11. 129. 140.]
288 cord_individual_obj[indivial_i, :] = [ 7. 11. 81. 92.]
289 cord_individual_obj[indivial_i, :] = [ 8. 11. 118. 129.]
290 cord_individual_obj[indivial_i, :] = [ 9. 12. 140. 152.]
291 cord_individual_obj[indivial_i, :] = [ 10. 11. 108. 119.]
292 cord_individual_obj[indivial_i, :] = [ 11. 10. 160. 170.]
293 cord_individual_obj[indivial_i, :] = [ 12. 13. 180. 193.]
294 cord_individual_obj[indivial_i, :] = [ 13. 9. 145. 154.]
295 cord_individual_obj[indivial_i, :] = [ 14. 10. 149. 159.]
296 cord_individual_obj[indivial_i, :] = [ 15. 11. 146. 157.]
297 cord_individual_obj[indivial_i, :] = [ 16. 11. 150. 161.]
298 cord_individual_obj[indivial_i, :] = [ 17. 11. 119. 130.]
299 cord_individual_obj[indivial_i, :] = [ 18. 14. 172. 186.]
300 cord_individual_obj[indivial_i, :] = [ 19. 12. 168. 180.]
301 cord_individual_obj[indivial_i, :] = [ 20. 10. 132. 142.]
302 cord_individual_obj[indivial_i, :] = [ 21. 10. 120. 130.]
303 cord_individual_obj[indivial_i, :] = [ 22. 11. 134. 145.]
304 cord_individual_obj[indivial_i, :] = [ 23. 10. 141. 151.]
305 cord_individual_obj[indivial_i, :] = [ 24. 10. 141. 151.]
306

307 min(cord_individual_obj[:, 3]) = 92.0
308 historl_G_best_iter[iter, 3] = 92.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0. 10. 133. 143.]
313 cord_individual_obj[indivial_i, :] = [ 1. 11. 121. 132.]
314 cord_individual_obj[indivial_i, :] = [ 2. 11. 81. 92.]
315 cord_individual_obj[indivial_i, :] = [ 3. 12. 140. 152.]
316 cord_individual_obj[indivial_i, :] = [ 4. 13. 221. 234.]
317 cord_individual_obj[indivial_i, :] = [ 5. 10. 101. 111.]
318 cord_individual_obj[indivial_i, :] = [ 6. 10. 153. 163.]
319 cord_individual_obj[indivial_i, :] = [ 7. 11. 155. 166.]
320 cord_individual_obj[indivial_i, :] = [ 8. 14. 157. 171.]
321 cord_individual_obj[indivial_i, :] = [ 9. 12. 142. 154.]
322 cord_individual_obj[indivial_i, :] = [ 10. 12. 184. 196.]
323 cord_individual_obj[indivial_i, :] = [ 11. 12. 127. 139.]
324 cord_individual_obj[indivial_i, :] = [ 12. 12. 146. 158.]
325 cord_individual_obj[indivial_i, :] = [ 13. 9. 140. 149.]
326 cord_individual_obj[indivial_i, :] = [ 14. 10. 141. 151.]
327 cord_individual_obj[indivial_i, :] = [ 15. 13. 160. 173.]
328 cord_individual_obj[indivial_i, :] = [ 16. 11. 183. 194.]
329 cord_individual_obj[indivial_i, :] = [ 17. 11. 170. 181.]
330 cord_individual_obj[indivial_i, :] = [ 18. 12. 100. 112.]
331 cord_individual_obj[indivial_i, :] = [ 19. 12. 95. 107.]

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332 cord_individual_obj[indivial_i, :] = [ 20. 10. 131. 141.]
333 cord_individual_obj[indivial_i, :] = [ 21. 12. 99. 111.]
334 cord_individual_obj[indivial_i, :] = [ 22. 11. 112. 123.]
335 cord_individual_obj[indivial_i, :] = [ 23. 12. 123. 135.]
336 cord_individual_obj[indivial_i, :] = [ 24. 12. 165. 177.]
337
338 min(cord_individual_obj[:, 3]) = 92.0
339 histol_G_best_iter[iter, 3] = 92.0
340 Begin iteration:
341
342 iter = 10
343 cord_individual_obj[indivial_i, :] = [ 0. 10. 120. 130.]
344 cord_individual_obj[indivial_i, :] = [ 1. 10. 136. 146.]
345 cord_individual_obj[indivial_i, :] = [ 2. 11. 187. 198.]
346 cord_individual_obj[indivial_i, :] = [ 3. 13. 201. 214.]
347 cord_individual_obj[indivial_i, :] = [ 4. 11. 81. 92.]
348 cord_individual_obj[indivial_i, :] = [ 5. 10. 128. 138.]
349 cord_individual_obj[indivial_i, :] = [ 6. 11. 129. 140.]
350 cord_individual_obj[indivial_i, :] = [ 7. 10. 123. 133.]
351 cord_individual_obj[indivial_i, :] = [ 8. 12. 260. 272.]
352 cord_individual_obj[indivial_i, :] = [ 9. 11. 143. 154.]
353 cord_individual_obj[indivial_i, :] = [ 10. 12. 136. 148.]
354 cord_individual_obj[indivial_i, :] = [ 11. 12. 128. 140.]
355 cord_individual_obj[indivial_i, :] = [ 12. 13. 160. 173.]
356 cord_individual_obj[indivial_i, :] = [ 13. 11. 156. 167.]
357 cord_individual_obj[indivial_i, :] = [ 14. 10. 145. 155.]
358 cord_individual_obj[indivial_i, :] = [ 15. 11. 153. 164.]
359 cord_individual_obj[indivial_i, :] = [ 16. 11. 123. 134.]
360 cord_individual_obj[indivial_i, :] = [ 17. 9. 98. 107.]
361 cord_individual_obj[indivial_i, :] = [ 18. 10. 178. 188.]
362 cord_individual_obj[indivial_i, :] = [ 19. 11. 112. 123.]
363 cord_individual_obj[indivial_i, :] = [ 20. 11. 163. 174.]
364 cord_individual_obj[indivial_i, :] = [ 21. 10. 95. 105.]
365 cord_individual_obj[indivial_i, :] = [ 22. 10. 177. 187.]
366 cord_individual_obj[indivial_i, :] = [ 23. 11. 128. 139.]
367 cord_individual_obj[indivial_i, :] = [ 24. 13. 158. 171.]
368
369 min(cord_individual_obj[:, 3]) = 92.0
370 histol_G_best_iter[iter, 3] = 92.0
371 Begin iteration:
372
373 iter = 11
374 cord_individual_obj[indivial_i, :] = [ 0. 14. 148. 162.]
375 cord_individual_obj[indivial_i, :] = [ 1. 11. 137. 148.]
376 cord_individual_obj[indivial_i, :] = [ 2. 12. 123. 135.]
377 cord_individual_obj[indivial_i, :] = [ 3. 11. 122. 133.]
378 cord_individual_obj[indivial_i, :] = [ 4. 10. 98. 108.]
379 cord_individual_obj[indivial_i, :] = [ 5. 10. 115. 125.]
380 cord_individual_obj[indivial_i, :] = [ 6. 10. 136. 146.]
381 cord_individual_obj[indivial_i, :] = [ 7. 10. 100. 110.]
382 cord_individual_obj[indivial_i, :] = [ 8. 11. 81. 92.]
383 cord_individual_obj[indivial_i, :] = [ 9. 10. 129. 139.]
384 cord_individual_obj[indivial_i, :] = [ 10. 11. 118. 129.]
385 cord_individual_obj[indivial_i, :] = [ 11. 10. 110. 120.]
386 cord_individual_obj[indivial_i, :] = [ 12. 10. 188. 198.]
387 cord_individual_obj[indivial_i, :] = [ 13. 9. 126. 135.]
388 cord_individual_obj[indivial_i, :] = [ 14. 11. 129. 140.]
389 cord_individual_obj[indivial_i, :] = [ 15. 12. 166. 178.]
390 cord_individual_obj[indivial_i, :] = [ 16. 11. 231. 242.]
391 cord_individual_obj[indivial_i, :] = [ 17. 10. 189. 199.]
392 cord_individual_obj[indivial_i, :] = [ 18. 13. 122. 135.]
393 cord_individual_obj[indivial_i, :] = [ 19. 13. 147. 160.]
394 cord_individual_obj[indivial_i, :] = [ 20. 10. 158. 168.]
395 cord_individual_obj[indivial_i, :] = [ 21. 11. 107. 118.]
396 cord_individual_obj[indivial_i, :] = [ 22. 10. 201. 211.]
397 cord_individual_obj[indivial_i, :] = [ 23. 12. 138. 150.]
398 cord_individual_obj[indivial_i, :] = [ 24. 12. 171. 183.]
399
400 min(cord_individual_obj[:, 3]) = 92.0
401 histol_G_best_iter[iter, 3] = 92.0
402 Begin iteration:
403
404 iter = 12
405 cord_individual_obj[indivial_i, :] = [ 0. 11. 168. 179.]
406 cord_individual_obj[indivial_i, :] = [ 1. 11. 122. 133.]
407 cord_individual_obj[indivial_i, :] = [ 2. 9. 135. 144.]
408 cord_individual_obj[indivial_i, :] = [ 3. 11. 113. 124.]
409 cord_individual_obj[indivial_i, :] = [ 4. 11. 143. 154.]
410 cord_individual_obj[indivial_i, :] = [ 5. 12. 144. 156.]
411 cord_individual_obj[indivial_i, :] = [ 6. 11. 122. 133.]
412 cord_individual_obj[indivial_i, :] = [ 7. 10. 171. 181.]
413 cord_individual_obj[indivial_i, :] = [ 8. 11. 117. 128.]
414 cord_individual_obj[indivial_i, :] = [ 9. 12. 202. 214.]
415 cord_individual_obj[indivial_i, :] = [ 10. 11. 158. 169.]

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416 cord_individual_obj[indivial_i,:] = [ 11. 12. 156. 168.]
417 cord_individual_obj[indivial_i,:] = [ 12. 11. 156. 167.]
418 cord_individual_obj[indivial_i,:] = [ 13. 9. 139. 148.]
419 cord_individual_obj[indivial_i,:] = [ 14. 12. 129. 141.]
420 cord_individual_obj[indivial_i,:] = [ 15. 11. 180. 191.]
421 cord_individual_obj[indivial_i,:] = [16. 11. 81. 92.]
422 cord_individual_obj[indivial_i,:] = [ 17. 9. 97. 106.]
423 cord_individual_obj[indivial_i,:] = [ 18. 11. 124. 135.]
424 cord_individual_obj[indivial_i,:] = [ 19. 11. 131. 142.]
425 cord_individual_obj[indivial_i,:] = [ 20. 11. 252. 263.]
426 cord_individual_obj[indivial_i,:] = [ 21. 11. 152. 163.]
427 cord_individual_obj[indivial_i,:] = [ 22. 10. 167. 177.]
428 cord_individual_obj[indivial_i,:] = [ 23. 10. 141. 151.]
429 cord_individual_obj[indivial_i,:] = [ 24. 13. 149. 162.]
430
431 min(cord_individual_obj[:,3]) = 92.0
432 histol_G_best_iter[iter,3] = 92.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [ 0. 10. 193. 203.]
437 cord_individual_obj[indivial_i,:] = [ 1. 12. 118. 130.]
438 cord_individual_obj[indivial_i,:] = [ 2. 10. 252. 262.]
439 cord_individual_obj[indivial_i,:] = [ 3. 10. 130. 140.]
440 cord_individual_obj[indivial_i,:] = [ 4. 9. 164. 173.]
441 cord_individual_obj[indivial_i,:] = [ 5. 9. 111. 120.]
442 cord_individual_obj[indivial_i,:] = [ 6. 13. 132. 145.]
443 cord_individual_obj[indivial_i,:] = [ 7. 9. 168. 177.]
444 cord_individual_obj[indivial_i,:] = [ 8. 10. 174. 184.]
445 cord_individual_obj[indivial_i,:] = [ 9. 11. 128. 139.]
446 cord_individual_obj[indivial_i,:] = [10. 12. 114. 126.]
447 cord_individual_obj[indivial_i,:] = [11. 12. 161. 173.]
448 cord_individual_obj[indivial_i,:] = [12. 10. 127. 137.]
449 cord_individual_obj[indivial_i,:] = [13. 10. 122. 132.]
450 cord_individual_obj[indivial_i,:] = [14. 11. 156. 167.]
451 cord_individual_obj[indivial_i,:] = [15. 10. 161. 171.]
452 cord_individual_obj[indivial_i,:] = [16. 12. 154. 166.]
453 cord_individual_obj[indivial_i,:] = [17. 10. 119. 129.]
454 cord_individual_obj[indivial_i,:] = [18. 10. 168. 178.]
455 cord_individual_obj[indivial_i,:] = [19. 11. 138. 149.]
456 cord_individual_obj[indivial_i,:] = [20. 11. 81. 92.]
457 cord_individual_obj[indivial_i,:] = [21. 13. 116. 129.]
458 cord_individual_obj[indivial_i,:] = [22. 11. 145. 156.]
459 cord_individual_obj[indivial_i,:] = [23. 11. 114. 125.]
460 cord_individual_obj[indivial_i,:] = [24. 13. 154. 167.]
461
462 min(cord_individual_obj[:,3]) = 92.0
463 histol_G_best_iter[iter,3] = 92.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [ 0. 10. 110. 120.]
468 cord_individual_obj[indivial_i,:] = [ 1. 11. 150. 161.]
469 cord_individual_obj[indivial_i,:] = [ 2. 11. 81. 92.]
470 cord_individual_obj[indivial_i,:] = [ 3. 11. 151. 162.]
471 cord_individual_obj[indivial_i,:] = [ 4. 11. 173. 184.]
472 cord_individual_obj[indivial_i,:] = [ 5. 12. 117. 129.]
473 cord_individual_obj[indivial_i,:] = [ 6. 10. 147. 157.]
474 cord_individual_obj[indivial_i,:] = [ 7. 11. 135. 146.]
475 cord_individual_obj[indivial_i,:] = [ 8. 11. 123. 134.]
476 cord_individual_obj[indivial_i,:] = [ 9. 10. 106. 116.]
477 cord_individual_obj[indivial_i,:] = [10. 14. 139. 153.]
478 cord_individual_obj[indivial_i,:] = [11. 13. 128. 141.]
479 cord_individual_obj[indivial_i,:] = [12. 10. 156. 166.]
480 cord_individual_obj[indivial_i,:] = [13. 9. 124. 133.]
481 cord_individual_obj[indivial_i,:] = [14. 11. 95. 106.]
482 cord_individual_obj[indivial_i,:] = [15. 13. 182. 195.]
483 cord_individual_obj[indivial_i,:] = [16. 9. 173. 182.]
484 cord_individual_obj[indivial_i,:] = [17. 11. 135. 146.]
485 cord_individual_obj[indivial_i,:] = [18. 14. 124. 138.]
486 cord_individual_obj[indivial_i,:] = [19. 12. 112. 124.]
487 cord_individual_obj[indivial_i,:] = [20. 11. 127. 138.]
488 cord_individual_obj[indivial_i,:] = [21. 11. 158. 169.]
489 cord_individual_obj[indivial_i,:] = [22. 12. 130. 142.]
490 cord_individual_obj[indivial_i,:] = [23. 11. 111. 122.]
491 cord_individual_obj[indivial_i,:] = [24. 12. 134. 146.]
492
493 min(cord_individual_obj[:,3]) = 92.0
494 histol_G_best_iter[iter,3] = 92.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [ 0. 10. 111. 121.]
499 cord_individual_obj[indivial_i,:] = [ 1. 11. 143. 154.]

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500 cord_individual_obj[indivial_i,:] = [ 2. 13. 197. 210.]
501 cord_individual_obj[indivial_i,:] = [ 3. 13. 189. 202.]
502 cord_individual_obj[indivial_i,:] = [ 4. 10. 134. 144.]
503 cord_individual_obj[indivial_i,:] = [ 5. 9. 172. 181.]
504 cord_individual_obj[indivial_i,:] = [ 6. 11. 156. 167.]
505 cord_individual_obj[indivial_i,:] = [ 7. 9. 141. 150.]
506 cord_individual_obj[indivial_i,:] = [ 8. 13. 149. 162.]
507 cord_individual_obj[indivial_i,:] = [ 9. 12. 165. 177.]
508 cord_individual_obj[indivial_i,:] = [ 10. 12. 154. 166.]
509 cord_individual_obj[indivial_i,:] = [ 11. 10. 133. 143.]
510 cord_individual_obj[indivial_i,:] = [ 12. 13. 208. 221.]
511 cord_individual_obj[indivial_i,:] = [ 13. 10. 124. 134.]
512 cord_individual_obj[indivial_i,:] = [ 14. 11. 145. 156.]
513 cord_individual_obj[indivial_i,:] = [ 15. 11. 81. 92.]
514 cord_individual_obj[indivial_i,:] = [ 16. 11. 223. 234.]
515 cord_individual_obj[indivial_i,:] = [ 17. 11. 137. 148.]
516 cord_individual_obj[indivial_i,:] = [ 18. 12. 234. 246.]
517 cord_individual_obj[indivial_i,:] = [ 19. 11. 119. 130.]
518 cord_individual_obj[indivial_i,:] = [ 20. 11. 158. 169.]
519 cord_individual_obj[indivial_i,:] = [ 21. 12. 143. 155.]
520 cord_individual_obj[indivial_i,:] = [ 22. 9. 124. 133.]
521 cord_individual_obj[indivial_i,:] = [ 23. 11. 126. 137.]
522 cord_individual_obj[indivial_i,:] = [ 24. 11. 154. 165.]
523
524 min(cord_individual_obj[:, 3]) = 92.0
525 histol_G_best_iter[iter, 3] = 92.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i,:] = [ 0. 12. 187. 199.]
530 cord_individual_obj[indivial_i,:] = [ 1. 11. 140. 151.]
531 cord_individual_obj[indivial_i,:] = [ 2. 12. 143. 155.]
532 cord_individual_obj[indivial_i,:] = [ 3. 14. 159. 173.]
533 cord_individual_obj[indivial_i,:] = [ 4. 11. 111. 122.]
534 cord_individual_obj[indivial_i,:] = [ 5. 10. 143. 153.]
535 cord_individual_obj[indivial_i,:] = [ 6. 11. 119. 130.]
536 cord_individual_obj[indivial_i,:] = [ 7. 10. 185. 195.]
537 cord_individual_obj[indivial_i,:] = [ 8. 10. 166. 176.]
538 cord_individual_obj[indivial_i,:] = [ 9. 11. 210. 221.]
539 cord_individual_obj[indivial_i,:] = [ 10. 11. 148. 159.]
540 cord_individual_obj[indivial_i,:] = [ 11. 8. 137. 145.]
541 cord_individual_obj[indivial_i,:] = [ 12. 14. 147. 161.]
542 cord_individual_obj[indivial_i,:] = [ 13. 11. 168. 179.]
543 cord_individual_obj[indivial_i,:] = [ 14. 9. 140. 149.]
544 cord_individual_obj[indivial_i,:] = [ 15. 11. 148. 159.]
545 cord_individual_obj[indivial_i,:] = [ 16. 10. 108. 118.]
546 cord_individual_obj[indivial_i,:] = [ 17. 10. 154. 164.]
547 cord_individual_obj[indivial_i,:] = [ 18. 11. 81. 92.]
548 cord_individual_obj[indivial_i,:] = [ 19. 13. 153. 166.]
549 cord_individual_obj[indivial_i,:] = [ 20. 11. 118. 129.]
550 cord_individual_obj[indivial_i,:] = [ 21. 11. 131. 142.]
551 cord_individual_obj[indivial_i,:] = [ 22. 11. 134. 145.]
552 cord_individual_obj[indivial_i,:] = [ 23. 11. 144. 155.]
553 cord_individual_obj[indivial_i,:] = [ 24. 10. 140. 150.]
554
555 min(cord_individual_obj[:, 3]) = 92.0
556 histol_G_best_iter[iter, 3] = 92.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i,:] = [ 0. 11. 102. 113.]
561 cord_individual_obj[indivial_i,:] = [ 1. 11. 117. 128.]
562 cord_individual_obj[indivial_i,:] = [ 2. 11. 124. 135.]
563 cord_individual_obj[indivial_i,:] = [ 3. 12. 163. 175.]
564 cord_individual_obj[indivial_i,:] = [ 4. 10. 170. 180.]
565 cord_individual_obj[indivial_i,:] = [ 5. 10. 129. 139.]
566 cord_individual_obj[indivial_i,:] = [ 6. 10. 102. 112.]
567 cord_individual_obj[indivial_i,:] = [ 7. 11. 172. 183.]
568 cord_individual_obj[indivial_i,:] = [ 8. 12. 104. 116.]
569 cord_individual_obj[indivial_i,:] = [ 9. 11. 81. 92.]
570 cord_individual_obj[indivial_i,:] = [ 10. 13. 172. 185.]
571 cord_individual_obj[indivial_i,:] = [ 11. 11. 146. 157.]
572 cord_individual_obj[indivial_i,:] = [ 12. 11. 120. 131.]
573 cord_individual_obj[indivial_i,:] = [ 13. 9. 171. 180.]
574 cord_individual_obj[indivial_i,:] = [ 14. 11. 112. 123.]
575 cord_individual_obj[indivial_i,:] = [ 15. 10. 133. 143.]
576 cord_individual_obj[indivial_i,:] = [ 16. 10. 158. 168.]
577 cord_individual_obj[indivial_i,:] = [ 17. 10. 169. 179.]
578 cord_individual_obj[indivial_i,:] = [ 18. 11. 155. 166.]
579 cord_individual_obj[indivial_i,:] = [ 19. 13. 131. 144.]
580 cord_individual_obj[indivial_i,:] = [ 20. 11. 103. 114.]
581 cord_individual_obj[indivial_i,:] = [ 21. 11. 136. 147.]
582 cord_individual_obj[indivial_i,:] = [ 22. 10. 152. 162.]
583 cord_individual_obj[indivial_i,:] = [ 23. 10. 126. 136.]

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584     cord_individual_obj[indivial_i, :] = [ 24. 11. 115. 126.]
585
586     min(cord_individual_obj[:, 3]) = 92.0
587     historl_G_best_iter[iter, 3] = 92.0
588 Begin iteration:
589 iter = 18
590     cord_individual_obj[indivial_i, :] = [ 0. 10. 221. 231.]
591     cord_individual_obj[indivial_i, :] = [ 1. 10. 151. 161.]
592     cord_individual_obj[indivial_i, :] = [ 2. 10. 113. 123.]
593     cord_individual_obj[indivial_i, :] = [ 3. 12. 141. 153.]
594     cord_individual_obj[indivial_i, :] = [ 4. 12. 126. 138.]
595     cord_individual_obj[indivial_i, :] = [ 5. 10. 157. 167.]
596     cord_individual_obj[indivial_i, :] = [ 6. 11. 128. 139.]
597     cord_individual_obj[indivial_i, :] = [ 7. 11. 139. 150.]
598     cord_individual_obj[indivial_i, :] = [ 8. 11. 126. 137.]
599     cord_individual_obj[indivial_i, :] = [ 9. 12. 172. 184.]
600     cord_individual_obj[indivial_i, :] = [10. 11. 81. 92.]
601     cord_individual_obj[indivial_i, :] = [11. 9. 91. 100.]
602     cord_individual_obj[indivial_i, :] = [12. 11. 136. 147.]
603     cord_individual_obj[indivial_i, :] = [13. 10. 171. 181.]
604     cord_individual_obj[indivial_i, :] = [14. 11. 136. 147.]
605     cord_individual_obj[indivial_i, :] = [15. 12. 143. 155.]
606     cord_individual_obj[indivial_i, :] = [16. 9. 113. 122.]
607     cord_individual_obj[indivial_i, :] = [17. 9. 102. 111.]
608     cord_individual_obj[indivial_i, :] = [18. 11. 144. 155.]
609     cord_individual_obj[indivial_i, :] = [19. 12. 155. 167.]
610     cord_individual_obj[indivial_i, :] = [20. 11. 202. 213.]
611     cord_individual_obj[indivial_i, :] = [21. 11. 104. 115.]
612     cord_individual_obj[indivial_i, :] = [22. 10. 181. 191.]
613     cord_individual_obj[indivial_i, :] = [23. 10. 142. 152.]
614     cord_individual_obj[indivial_i, :] = [24. 10. 115. 125.]
615
616
617     min(cord_individual_obj[:, 3]) = 92.0
618     historl_G_best_iter[iter, 3] = 92.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0. 11. 81. 92.]
623     cord_individual_obj[indivial_i, :] = [ 1. 11. 110. 121.]
624     cord_individual_obj[indivial_i, :] = [ 2. 11. 146. 157.]
625     cord_individual_obj[indivial_i, :] = [ 3. 11. 121. 132.]
626     cord_individual_obj[indivial_i, :] = [ 4. 9. 119. 128.]
627     cord_individual_obj[indivial_i, :] = [ 5. 10. 135. 145.]
628     cord_individual_obj[indivial_i, :] = [ 6. 11. 112. 123.]
629     cord_individual_obj[indivial_i, :] = [ 7. 10. 104. 114.]
630     cord_individual_obj[indivial_i, :] = [ 8. 12. 115. 127.]
631     cord_individual_obj[indivial_i, :] = [ 9. 10. 122. 132.]
632     cord_individual_obj[indivial_i, :] = [10. 11. 160. 171.]
633     cord_individual_obj[indivial_i, :] = [11. 14. 127. 141.]
634     cord_individual_obj[indivial_i, :] = [12. 11. 84. 95.]
635     cord_individual_obj[indivial_i, :] = [13. 10. 83. 93.]
636     cord_individual_obj[indivial_i, :] = [14. 10. 96. 106.]
637     cord_individual_obj[indivial_i, :] = [15. 10. 104. 114.]
638     cord_individual_obj[indivial_i, :] = [16. 11. 121. 132.]
639     cord_individual_obj[indivial_i, :] = [17. 10. 100. 110.]
640     cord_individual_obj[indivial_i, :] = [18. 13. 158. 171.]
641     cord_individual_obj[indivial_i, :] = [19. 11. 133. 144.]
642     cord_individual_obj[indivial_i, :] = [20. 10. 124. 134.]
643     cord_individual_obj[indivial_i, :] = [21. 11. 108. 119.]
644     cord_individual_obj[indivial_i, :] = [22. 11. 186. 197.]
645     cord_individual_obj[indivial_i, :] = [23. 12. 130. 142.]
646     cord_individual_obj[indivial_i, :] = [24. 13. 128. 141.]
647
648     min(cord_individual_obj[:, 3]) = 92.0
649     historl_G_best_iter[iter, 3] = 92.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0. 11. 194. 205.]
654     cord_individual_obj[indivial_i, :] = [ 1. 11. 126. 137.]
655     cord_individual_obj[indivial_i, :] = [ 2. 13. 120. 133.]
656     cord_individual_obj[indivial_i, :] = [ 3. 12. 136. 148.]
657     cord_individual_obj[indivial_i, :] = [ 4. 11. 179. 190.]
658     cord_individual_obj[indivial_i, :] = [ 5. 12. 125. 137.]
659     cord_individual_obj[indivial_i, :] = [ 6. 11. 136. 147.]
660     cord_individual_obj[indivial_i, :] = [ 7. 10. 165. 175.]
661     cord_individual_obj[indivial_i, :] = [ 8. 10. 148. 158.]
662     cord_individual_obj[indivial_i, :] = [ 9. 11. 191. 202.]
663     cord_individual_obj[indivial_i, :] = [10. 12. 143. 155.]
664     cord_individual_obj[indivial_i, :] = [11. 11. 128. 139.]
665     cord_individual_obj[indivial_i, :] = [12. 11. 151. 162.]
666     cord_individual_obj[indivial_i, :] = [13. 10. 104. 114.]
667     cord_individual_obj[indivial_i, :] = [14. 11. 132. 143.]

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668 cord_individual_obj[indivial_i,:] = [ 15. 11. 114. 125.]
669 cord_individual_obj[indivial_i,:] = [ 16. 10. 141. 151.]
670 cord_individual_obj[indivial_i,:] = [ 17. 9. 122. 131.]
671 cord_individual_obj[indivial_i,:] = [ 18. 12. 209. 221.]
672 cord_individual_obj[indivial_i,:] = [ 19. 12. 143. 155.]
673 cord_individual_obj[indivial_i,:] = [ 20. 11. 165. 176.]
674 cord_individual_obj[indivial_i,:] = [ 21. 10. 167. 177.]
675 cord_individual_obj[indivial_i,:] = [ 22. 11. 81. 92.]
676 cord_individual_obj[indivial_i,:] = [ 23. 10. 133. 143.]
677 cord_individual_obj[indivial_i,:] = [ 24. 11. 115. 126.]
678
679 min(cord_individual_obj[:, 3]) = 92.0
680 historl_G_best_iter[iter, 3] = 92.0
681 Iteration calculate over
682
683
684
685
686 All item are in Bin and:
687 Bin area = 1080
688 Real_area = 291.0
689 Proportion_of_area = 0.26944444444444443
690 BEST_CHROM =
691 berth: [ 6. 6.5 22. 20.5 3.5 6. 19. 12.5 12.5 4. 1.5 12.5 2. 20.5
692 11. 13.5 19.5 11. 26. ]
693 time: [ 1. 5. 6. 8. 8. 0. 9. 0. 6. 3. 0. 2. 5. 0. 8. 5. 2. 3. 2. ]
694 num_QC: [ 4. 3. 2. 3. 2. 6. 2. 2. 3. 4. 2. 4. 2. 5. 4. 3. 5. 3. 2. ]
695 Objective function values and some other indicators:
696 Obj0 = 11.00      Obj1 = 81.00      Obj0 + Obj1 = 92.00
697 Total movement of crane: 8.00
698 Total waiting time in berth position: 73.00
699 Total index of q during berthing: 909.00
700 Specific arrangement for each vessel:
701 V_id: 0          li: 6.0           xi: 6.0           bow of i: 3.0           tail of i: 9.0           gama_i0: 1.0           gama_i1: 1.0
80.0               gama_i1 + 1: 2.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
702 V_id: 1          li: 5.0           xi: 6.5           bow of i: 4.0           tail of i: 9.0           gama_i0: 5.0           gama_i1: 7.0
160.0              gama_i1 + 1: 8.0       gama_i1 - gama_i0: 2.0   duration_time_i: 3.0
703 V_id: 2          li: 8.0           xi: 22.0          bow of i: 18.0          tail of i: 26.0          gama_i0: 6.0           gama_i1: 7
.0                gama_i1 + 1: 8.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
load_i: 60.0       work load gap_i: 0
704 V_id: 3          li: 9.0           xi: 20.5          bow of i: 16.0          tail of i: 25.0          gama_i0: 8.0           gama_i1: 8
.0                gama_i1 + 1: 9.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
load_i: 60.0       work load gap_i: 0
705 V_id: 4          li: 7.0           xi: 3.5           bow of i: 0.0           tail of i: 7.0           gama_i0: 8.0           gama_i1: 11.0
load_i: 160.0      gama_i1 + 1: 12.0      gama_i1 - gama_i0: 3.0   duration_time_i: 4.0
706 V_id: 5          li: 6.0           xi: 6.0           bow of i: 3.0           tail of i: 9.0           gama_i0: 0.0           gama_i1: 0.0
120.0              gama_i1 + 1: 1.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
707 V_id: 6          li: 8.0           xi: 19.0          bow of i: 15.0          tail of i: 23.0          gama_i0: 9.0           gama_i1: 0
10.0              gama_i1 + 1: 11.0      gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
load_i: 80.0       work load gap_i: 0
708 V_id: 7          li: 7.0           xi: 12.5          bow of i: 9.0           tail of i: 16.0          gama_i0: 0.0           gama_i1: 1
.0                gama_i1 + 1: 2.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
load_i: 80.0       work load gap_i: 0
709 V_id: 8          li: 7.0           xi: 12.5          bow of i: 9.0           tail of i: 16.0          gama_i0: 6.0           gama_i1: 7
.0                gama_i1 + 1: 8.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
load_i: 100.0      work load gap_i: 0
710 V_id: 9          li: 8.0           xi: 4.0            bow of i: 0.0           tail of i: 8.0           gama_i0: 3.0           gama_i1: 4.0
160.0              gama_i1 + 1: 5.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
711 V_id: 10         li: 3.0           xi: 1.5            bow of i: 0.0           tail of i: 3.0           gama_i0: 0.0           gama_i1: 2.0
100.0              gama_i1 + 1: 3.0       gama_i1 - gama_i0: 2.0   duration_time_i: 3.0
712 V_id: 11         li: 7.0           xi: 12.5          bow of i: 9.0           tail of i: 16.0          gama_i0: 2.0           gama_i1: 0
: 2.0              gama_i1 + 1: 3.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
load_i: 80.0       work load gap_i: 0
713 V_id: 12         li: 4.0           xi: 2.0            bow of i: 0.0           tail of i: 4.0           gama_i0: 5.0           gama_i1: 6.0
60.0                gama_i1 + 1: 7.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
714 V_id: 13         li: 9.0           xi: 20.5          bow of i: 16.0          tail of i: 25.0          gama_i0: 0.0           gama_i1: 0
: 1.0              gama_i1 + 1: 2.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
load_i: 140.0      work load gap_i: 0
715 V_id: 14         li: 8.0           xi: 11.0          bow of i: 7.0           tail of i: 15.0          gama_i0: 8.0           gama_i1: 0
: 9.0              gama_i1 + 1: 10.0      gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
load_i: 120.0      work load gap_i: 0
716 V_id: 15         li: 9.0           xi: 13.5          bow of i: 9.0           tail of i: 18.0          gama_i0: 5.0           gama_i1: 0
: 5.0              gama_i1 + 1: 6.0       gama_i1 - gama_i0: 0.0   duration_time_i: 1.0
load_i: 60.0       work load gap_i: 0
717 V_id: 16         li: 7.0           xi: 19.5          bow of i: 16.0          tail of i: 23.0          gama_i0: 2.0           gama_i1: 0
: 3.0              gama_i1 + 1: 4.0       gama_i1 - gama_i0: 1.0   duration_time_i: 2.0
load_i: 120.0      work load gap_i: 0

```

unknown

718	V_id: 17 : 4.0 load_i: 100.0	li: 6.0 gama_i1 + 1: 5.0 work load gap_i: 0	xi: 11.0 gama_i1 - gama_i0: 1.0	bow of i: 8.0 gama_i1 - gama_i0: 1.0	tail of i: 14.0 duration_time_i: 2.0	gama_i0: 3.0 demand_i: 100.0	gama_i1 work
719	V_id: 18 : 5.0 load_i: 140.0	li: 6.0 gama_i1 + 1: 6.0 work load gap_i: 0	xi: 26.0 gama_i1 - gama_i0: 3.0	bow of i: 23.0 gama_i1 - gama_i0: 3.0	tail of i: 29.0 duration_time_i: 4.0	gama_i0: 2.0 demand_i: 140.0	gama_i1 work
720	Algorithm finished and the total CPU time: 527 s						
721	End						
722							
723							