

unknown

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80 cord_individual_obj[indivial_i,:] = [ 16. 10. 134. 144.]
81 cord_individual_obj[indivial_i,:] = [ 17. 9. 128. 137.]
82 cord_individual_obj[indivial_i,:] = [18. 11. 86. 97.]
83 cord_individual_obj[indivial_i,:] = [ 19. 9. 122. 131.]
84 cord_individual_obj[indivial_i,:] = [ 20. 10. 147. 157.]
85 cord_individual_obj[indivial_i,:] = [ 21. 10. 150. 160.]
86 cord_individual_obj[indivial_i,:] = [ 22. 11. 189. 200.]
87 cord_individual_obj[indivial_i,:] = [ 23. 11. 110. 121.]
88 cord_individual_obj[indivial_i,:] = [ 24. 11. 116. 127.]
89
90 min(cord_individual_obj[:,3]) = 86.0
91 historl_G_best_iter[iter, 3] = 86.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 10. 160. 170.]
96 cord_individual_obj[indivial_i,:] = [ 1. 11. 75. 86.]
97 cord_individual_obj[indivial_i,:] = [ 2. 12. 185. 197.]
98 cord_individual_obj[indivial_i,:] = [ 3. 10. 173. 183.]
99 cord_individual_obj[indivial_i,:] = [ 4. 13. 123. 136.]
100 cord_individual_obj[indivial_i,:] = [ 5. 13. 81. 94.]
101 cord_individual_obj[indivial_i,:] = [ 6. 9. 101. 110.]
102 cord_individual_obj[indivial_i,:] = [ 7. 10. 148. 158.]
103 cord_individual_obj[indivial_i,:] = [ 8. 10. 118. 128.]
104 cord_individual_obj[indivial_i,:] = [ 9. 10. 138. 148.]
105 cord_individual_obj[indivial_i,:] = [ 10. 14. 207. 221.]
106 cord_individual_obj[indivial_i,:] = [ 11. 9. 144. 153.]
107 cord_individual_obj[indivial_i,:] = [ 12. 12. 94. 106.]
108 cord_individual_obj[indivial_i,:] = [ 13. 10. 159. 169.]
109 cord_individual_obj[indivial_i,:] = [ 14. 11. 128. 139.]
110 cord_individual_obj[indivial_i,:] = [ 15. 11. 179. 190.]
111 cord_individual_obj[indivial_i,:] = [ 16. 11. 126. 137.]
112 cord_individual_obj[indivial_i,:] = [ 17. 13. 124. 137.]
113 cord_individual_obj[indivial_i,:] = [18. 10. 76. 86.]
114 cord_individual_obj[indivial_i,:] = [ 19. 10. 154. 164.]
115 cord_individual_obj[indivial_i,:] = [ 20. 12. 165. 177.]
116 cord_individual_obj[indivial_i,:] = [21. 10. 87. 97.]
117 cord_individual_obj[indivial_i,:] = [ 22. 12. 91. 103.]
118 cord_individual_obj[indivial_i,:] = [ 23. 12. 111. 123.]
119 cord_individual_obj[indivial_i,:] = [ 24. 14. 130. 144.]
120
121 min(cord_individual_obj[:,3]) = 86.0
122 historl_G_best_iter[iter, 3] = 86.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 11. 174. 185.]
127 cord_individual_obj[indivial_i,:] = [ 1. 11. 74. 85.]
128 cord_individual_obj[indivial_i,:] = [ 2. 15. 153. 168.]
129 cord_individual_obj[indivial_i,:] = [ 3. 10. 114. 124.]
130 cord_individual_obj[indivial_i,:] = [ 4. 11. 101. 112.]
131 cord_individual_obj[indivial_i,:] = [ 5. 12. 132. 144.]
132 cord_individual_obj[indivial_i,:] = [ 6. 12. 137. 149.]
133 cord_individual_obj[indivial_i,:] = [ 7. 10. 88. 98.]
134 cord_individual_obj[indivial_i,:] = [ 8. 10. 130. 140.]
135 cord_individual_obj[indivial_i,:] = [ 9. 10. 150. 160.]
136 cord_individual_obj[indivial_i,:] = [10. 11. 75. 86.]
137 cord_individual_obj[indivial_i,:] = [ 11. 12. 160. 172.]
138 cord_individual_obj[indivial_i,:] = [ 12. 10. 151. 161.]
139 cord_individual_obj[indivial_i,:] = [ 13. 13. 171. 184.]
140 cord_individual_obj[indivial_i,:] = [ 14. 10. 149. 159.]
141 cord_individual_obj[indivial_i,:] = [ 15. 10. 110. 120.]
142 cord_individual_obj[indivial_i,:] = [ 16. 10. 124. 134.]
143 cord_individual_obj[indivial_i,:] = [ 17. 11. 137. 148.]
144 cord_individual_obj[indivial_i,:] = [ 18. 13. 185. 198.]
145 cord_individual_obj[indivial_i,:] = [ 19. 11. 114. 125.]
146 cord_individual_obj[indivial_i,:] = [ 20. 9. 178. 187.]
147 cord_individual_obj[indivial_i,:] = [ 21. 9. 162. 171.]
148 cord_individual_obj[indivial_i,:] = [ 22. 11. 153. 164.]
149 cord_individual_obj[indivial_i,:] = [ 23. 10. 103. 113.]
150 cord_individual_obj[indivial_i,:] = [ 24. 12. 121. 133.]
151
152 min(cord_individual_obj[:,3]) = 85.0
153 historl_G_best_iter[iter, 3] = 85.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 10. 136. 146.]
158 cord_individual_obj[indivial_i,:] = [ 1. 11. 143. 154.]
159 cord_individual_obj[indivial_i,:] = [ 2. 12. 131. 143.]
160 cord_individual_obj[indivial_i,:] = [ 3. 11. 157. 168.]
161 cord_individual_obj[indivial_i,:] = [ 4. 9. 116. 125.]
162 cord_individual_obj[indivial_i,:] = [ 5. 9. 141. 150.]
163 cord_individual_obj[indivial_i,:] = [ 6. 9. 152. 161.]

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164 cord_individual_obj[indivial_i,:] = [ 7. 10. 128. 138.]
165 cord_individual_obj[indivial_i,:] = [ 8. 9. 94. 103.]
166 cord_individual_obj[indivial_i,:] = [ 9. 12. 113. 125.]
167 cord_individual_obj[indivial_i,:] = [ 10. 12. 169. 181.]
168 cord_individual_obj[indivial_i,:] = [ 11. 13. 99. 112.]
169 cord_individual_obj[indivial_i,:] = [ 12. 9. 140. 149.]
170 cord_individual_obj[indivial_i,:] = [ 13. 9. 142. 151.]
171 cord_individual_obj[indivial_i,:] = [ 14. 10. 189. 199.]
172 cord_individual_obj[indivial_i,:] = [ 15. 9. 107. 116.]
173 cord_individual_obj[indivial_i,:] = [ 16. 10. 139. 149.]
174 cord_individual_obj[indivial_i,:] = [ 17. 10. 101. 111.]
175 cord_individual_obj[indivial_i,:] = [ 18. 11. 74. 85.]
176 cord_individual_obj[indivial_i,:] = [ 19. 12. 111. 123.]
177 cord_individual_obj[indivial_i,:] = [ 20. 11. 102. 113.]
178 cord_individual_obj[indivial_i,:] = [ 21. 9. 100. 109.]
179 cord_individual_obj[indivial_i,:] = [ 22. 11. 131. 142.]
180 cord_individual_obj[indivial_i,:] = [ 23. 9. 102. 111.]
181 cord_individual_obj[indivial_i,:] = [ 24. 11. 138. 149.]
182
183 min(cord_individual_obj[:,3]) = 85.0
184 historl_G_best_iter[iter,3] = 85.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i,:] = [ 0. 9. 146. 155.]
189 cord_individual_obj[indivial_i,:] = [ 1. 8. 79. 87.]
190 cord_individual_obj[indivial_i,:] = [ 2. 13. 82. 95.]
191 cord_individual_obj[indivial_i,:] = [ 3. 10. 85. 95.]
192 cord_individual_obj[indivial_i,:] = [ 4. 10. 103. 113.]
193 cord_individual_obj[indivial_i,:] = [ 5. 11. 114. 125.]
194 cord_individual_obj[indivial_i,:] = [ 6. 11. 88. 99.]
195 cord_individual_obj[indivial_i,:] = [ 7. 10. 162. 172.]
196 cord_individual_obj[indivial_i,:] = [ 8. 10. 110. 120.]
197 cord_individual_obj[indivial_i,:] = [ 9. 9. 133. 142.]
198 cord_individual_obj[indivial_i,:] = [ 10. 10. 149. 159.]
199 cord_individual_obj[indivial_i,:] = [ 11. 10. 169. 179.]
200 cord_individual_obj[indivial_i,:] = [ 12. 10. 118. 128.]
201 cord_individual_obj[indivial_i,:] = [ 13. 10. 170. 180.]
202 cord_individual_obj[indivial_i,:] = [ 14. 11. 74. 85.]
203 cord_individual_obj[indivial_i,:] = [ 15. 11. 72. 83.]
204 cord_individual_obj[indivial_i,:] = [ 16. 9. 164. 173.]
205 cord_individual_obj[indivial_i,:] = [ 17. 10. 126. 136.]
206 cord_individual_obj[indivial_i,:] = [ 18. 13. 198. 211.]
207 cord_individual_obj[indivial_i,:] = [ 19. 10. 118. 128.]
208 cord_individual_obj[indivial_i,:] = [ 20. 11. 95. 106.]
209 cord_individual_obj[indivial_i,:] = [ 21. 12. 103. 115.]
210 cord_individual_obj[indivial_i,:] = [ 22. 11. 184. 195.]
211 cord_individual_obj[indivial_i,:] = [ 23. 10. 125. 135.]
212 cord_individual_obj[indivial_i,:] = [ 24. 13. 113. 126.]
213
214 min(cord_individual_obj[:,3]) = 83.0
215 historl_G_best_iter[iter,3] = 83.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i,:] = [ 0. 10. 113. 123.]
220 cord_individual_obj[indivial_i,:] = [ 1. 13. 159. 172.]
221 cord_individual_obj[indivial_i,:] = [ 2. 10. 115. 125.]
222 cord_individual_obj[indivial_i,:] = [ 3. 10. 178. 188.]
223 cord_individual_obj[indivial_i,:] = [ 4. 11. 101. 112.]
224 cord_individual_obj[indivial_i,:] = [ 5. 12. 89. 101.]
225 cord_individual_obj[indivial_i,:] = [ 6. 10. 151. 161.]
226 cord_individual_obj[indivial_i,:] = [ 7. 12. 161. 173.]
227 cord_individual_obj[indivial_i,:] = [ 8. 9. 104. 113.]
228 cord_individual_obj[indivial_i,:] = [ 9. 11. 117. 128.]
229 cord_individual_obj[indivial_i,:] = [ 10. 11. 143. 154.]
230 cord_individual_obj[indivial_i,:] = [ 11. 10. 118. 128.]
231 cord_individual_obj[indivial_i,:] = [ 12. 13. 132. 145.]
232 cord_individual_obj[indivial_i,:] = [ 13. 11. 175. 186.]
233 cord_individual_obj[indivial_i,:] = [ 14. 12. 129. 141.]
234 cord_individual_obj[indivial_i,:] = [ 15. 11. 142. 153.]
235 cord_individual_obj[indivial_i,:] = [ 16. 10. 63. 73.]
236 cord_individual_obj[indivial_i,:] = [ 17. 9. 153. 162.]
237 cord_individual_obj[indivial_i,:] = [ 18. 11. 72. 83.]
238 cord_individual_obj[indivial_i,:] = [ 19. 9. 159. 168.]
239 cord_individual_obj[indivial_i,:] = [ 20. 11. 117. 128.]
240 cord_individual_obj[indivial_i,:] = [ 21. 11. 140. 151.]
241 cord_individual_obj[indivial_i,:] = [ 22. 12. 119. 131.]
242 cord_individual_obj[indivial_i,:] = [ 23. 10. 135. 145.]
243 cord_individual_obj[indivial_i,:] = [ 24. 10. 80. 90.]
244
245 min(cord_individual_obj[:,3]) = 73.0
246 historl_G_best_iter[iter,3] = 73.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0. 10. 144. 154.]
251 cord_individual_obj[indivial_i, :] = [ 1. 9. 164. 173.]
252 cord_individual_obj[indivial_i, :] = [ 2. 11. 143. 154.]
253 cord_individual_obj[indivial_i, :] = [ 3. 10. 63. 73.]
254 cord_individual_obj[indivial_i, :] = [ 4. 11. 132. 143.]
255 cord_individual_obj[indivial_i, :] = [ 5. 10. 144. 154.]
256 cord_individual_obj[indivial_i, :] = [ 6. 10. 138. 148.]
257 cord_individual_obj[indivial_i, :] = [ 7. 11. 124. 135.]
258 cord_individual_obj[indivial_i, :] = [ 8. 10. 155. 165.]
259 cord_individual_obj[indivial_i, :] = [ 9. 9. 186. 195.]
260 cord_individual_obj[indivial_i, :] = [ 10. 12. 91. 103.]
261 cord_individual_obj[indivial_i, :] = [ 11. 9. 109. 118.]
262 cord_individual_obj[indivial_i, :] = [ 12. 11. 114. 125.]
263 cord_individual_obj[indivial_i, :] = [ 13. 10. 136. 146.]
264 cord_individual_obj[indivial_i, :] = [ 14. 10. 125. 135.]
265 cord_individual_obj[indivial_i, :] = [ 15. 9. 135. 144.]
266 cord_individual_obj[indivial_i, :] = [ 16. 9. 114. 123.]
267 cord_individual_obj[indivial_i, :] = [ 17. 11. 122. 133.]
268 cord_individual_obj[indivial_i, :] = [ 18. 11. 124. 135.]
269 cord_individual_obj[indivial_i, :] = [ 19. 11. 148. 159.]
270 cord_individual_obj[indivial_i, :] = [ 20. 11. 108. 119.]
271 cord_individual_obj[indivial_i, :] = [ 21. 9. 131. 140.]
272 cord_individual_obj[indivial_i, :] = [ 22. 11. 100. 111.]
273 cord_individual_obj[indivial_i, :] = [ 23. 10. 137. 147.]
274 cord_individual_obj[indivial_i, :] = [ 24. 10. 173. 183.]
275

276 min(cord_individual_obj[:, 3]) = 73.0
277 historl_G_best_iter[iter, 3] = 73.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0. 9. 151. 160.]
282 cord_individual_obj[indivial_i, :] = [ 1. 9. 151. 160.]
283 cord_individual_obj[indivial_i, :] = [ 2. 12. 121. 133.]
284 cord_individual_obj[indivial_i, :] = [ 3. 12. 135. 147.]
285 cord_individual_obj[indivial_i, :] = [ 4. 8. 113. 121.]
286 cord_individual_obj[indivial_i, :] = [ 5. 10. 145. 155.]
287 cord_individual_obj[indivial_i, :] = [ 6. 12. 94. 106.]
288 cord_individual_obj[indivial_i, :] = [ 7. 11. 130. 141.]
289 cord_individual_obj[indivial_i, :] = [ 8. 8. 156. 164.]
290 cord_individual_obj[indivial_i, :] = [ 9. 10. 63. 73.]
291 cord_individual_obj[indivial_i, :] = [ 10. 10. 107. 117.]
292 cord_individual_obj[indivial_i, :] = [ 11. 10. 129. 139.]
293 cord_individual_obj[indivial_i, :] = [ 12. 11. 169. 180.]
294 cord_individual_obj[indivial_i, :] = [ 13. 12. 156. 168.]
295 cord_individual_obj[indivial_i, :] = [ 14. 10. 142. 152.]
296 cord_individual_obj[indivial_i, :] = [ 15. 10. 157. 167.]
297 cord_individual_obj[indivial_i, :] = [ 16. 9. 86. 95.]
298 cord_individual_obj[indivial_i, :] = [ 17. 11. 135. 146.]
299 cord_individual_obj[indivial_i, :] = [ 18. 9. 203. 212.]
300 cord_individual_obj[indivial_i, :] = [ 19. 10. 145. 155.]
301 cord_individual_obj[indivial_i, :] = [ 20. 9. 156. 165.]
302 cord_individual_obj[indivial_i, :] = [ 21. 10. 231. 241.]
303 cord_individual_obj[indivial_i, :] = [ 22. 11. 143. 154.]
304 cord_individual_obj[indivial_i, :] = [ 23. 10. 125. 135.]
305 cord_individual_obj[indivial_i, :] = [ 24. 10. 156. 166.]
306

307 min(cord_individual_obj[:, 3]) = 73.0
308 historl_G_best_iter[iter, 3] = 73.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0. 10. 117. 127.]
313 cord_individual_obj[indivial_i, :] = [ 1. 8. 166. 174.]
314 cord_individual_obj[indivial_i, :] = [ 2. 9. 109. 118.]
315 cord_individual_obj[indivial_i, :] = [ 3. 11. 117. 128.]
316 cord_individual_obj[indivial_i, :] = [ 4. 11. 106. 117.]
317 cord_individual_obj[indivial_i, :] = [ 5. 11. 167. 178.]
318 cord_individual_obj[indivial_i, :] = [ 6. 10. 143. 153.]
319 cord_individual_obj[indivial_i, :] = [ 7. 11. 108. 119.]
320 cord_individual_obj[indivial_i, :] = [ 8. 9. 158. 167.]
321 cord_individual_obj[indivial_i, :] = [ 9. 12. 116. 128.]
322 cord_individual_obj[indivial_i, :] = [ 10. 9. 105. 114.]
323 cord_individual_obj[indivial_i, :] = [ 11. 12. 116. 128.]
324 cord_individual_obj[indivial_i, :] = [ 12. 10. 118. 128.]
325 cord_individual_obj[indivial_i, :] = [ 13. 10. 106. 116.]
326 cord_individual_obj[indivial_i, :] = [ 14. 11. 85. 96.]
327 cord_individual_obj[indivial_i, :] = [ 15. 9. 92. 101.]
328 cord_individual_obj[indivial_i, :] = [ 16. 8. 160. 168.]
329 cord_individual_obj[indivial_i, :] = [ 17. 10. 209. 219.]
330 cord_individual_obj[indivial_i, :] = [ 18. 13. 152. 165.]
331 cord_individual_obj[indivial_i, :] = [ 19. 11. 144. 155.]

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332 cord_individual_obj[indivial_i, :] = [ 20. 10. 136. 146.]
333 cord_individual_obj[indivial_i, :] = [ 21. 10. 63. 73.]
334 cord_individual_obj[indivial_i, :] = [ 22. 14. 97. 111.]
335 cord_individual_obj[indivial_i, :] = [ 23. 11. 145. 156.]
336 cord_individual_obj[indivial_i, :] = [ 24. 9. 148. 157.]
337
338 min(cord_individual_obj[:, 3]) = 73.0
339 histol_G_best_iter[iter, 3] = 73.0
340 Begin iteration:
341
342 iter = 10
343 cord_individual_obj[indivial_i, :] = [ 0. 10. 147. 157.]
344 cord_individual_obj[indivial_i, :] = [ 1. 8. 139. 147.]
345 cord_individual_obj[indivial_i, :] = [ 2. 9. 121. 130.]
346 cord_individual_obj[indivial_i, :] = [ 3. 14. 140. 154.]
347 cord_individual_obj[indivial_i, :] = [ 4. 10. 113. 123.]
348 cord_individual_obj[indivial_i, :] = [ 5. 11. 120. 131.]
349 cord_individual_obj[indivial_i, :] = [ 6. 10. 99. 109.]
350 cord_individual_obj[indivial_i, :] = [ 7. 12. 116. 128.]
351 cord_individual_obj[indivial_i, :] = [ 8. 10. 127. 137.]
352 cord_individual_obj[indivial_i, :] = [ 9. 9. 108. 117.]
353 cord_individual_obj[indivial_i, :] = [ 10. 11. 127. 138.]
354 cord_individual_obj[indivial_i, :] = [ 11. 9. 117. 126.]
355 cord_individual_obj[indivial_i, :] = [ 12. 9. 138. 147.]
356 cord_individual_obj[indivial_i, :] = [ 13. 10. 131. 141.]
357 cord_individual_obj[indivial_i, :] = [ 14. 11. 148. 159.]
358 cord_individual_obj[indivial_i, :] = [ 15. 9. 139. 148.]
359 cord_individual_obj[indivial_i, :] = [ 16. 9. 92. 101.]
360 cord_individual_obj[indivial_i, :] = [ 17. 10. 63. 73.]
361 cord_individual_obj[indivial_i, :] = [ 18. 13. 165. 178.]
362 cord_individual_obj[indivial_i, :] = [ 19. 11. 183. 194.]
363 cord_individual_obj[indivial_i, :] = [ 20. 11. 99. 110.]
364 cord_individual_obj[indivial_i, :] = [ 21. 9. 120. 129.]
365 cord_individual_obj[indivial_i, :] = [ 22. 13. 70. 83.]
366 cord_individual_obj[indivial_i, :] = [ 23. 11. 122. 133.]
367 cord_individual_obj[indivial_i, :] = [ 24. 10. 113. 123.]
368
369 min(cord_individual_obj[:, 3]) = 73.0
370 histol_G_best_iter[iter, 3] = 73.0
371 Begin iteration:
372
373 iter = 11
374 cord_individual_obj[indivial_i, :] = [ 0. 9. 152. 161.]
375 cord_individual_obj[indivial_i, :] = [ 1. 10. 133. 143.]
376 cord_individual_obj[indivial_i, :] = [ 2. 15. 123. 138.]
377 cord_individual_obj[indivial_i, :] = [ 3. 10. 140. 150.]
378 cord_individual_obj[indivial_i, :] = [ 4. 10. 141. 151.]
379 cord_individual_obj[indivial_i, :] = [ 5. 10. 174. 184.]
380 cord_individual_obj[indivial_i, :] = [ 6. 11. 172. 183.]
381 cord_individual_obj[indivial_i, :] = [ 7. 13. 147. 160.]
382 cord_individual_obj[indivial_i, :] = [ 8. 9. 103. 112.]
383 cord_individual_obj[indivial_i, :] = [ 9. 9. 160. 169.]
384 cord_individual_obj[indivial_i, :] = [ 10. 10. 87. 97.]
385 cord_individual_obj[indivial_i, :] = [ 11. 11. 101. 112.]
386 cord_individual_obj[indivial_i, :] = [ 12. 11. 157. 168.]
387 cord_individual_obj[indivial_i, :] = [ 13. 11. 135. 146.]
388 cord_individual_obj[indivial_i, :] = [ 14. 8. 149. 157.]
389 cord_individual_obj[indivial_i, :] = [ 15. 10. 131. 141.]
390 cord_individual_obj[indivial_i, :] = [ 16. 10. 130. 140.]
391 cord_individual_obj[indivial_i, :] = [ 17. 10. 88. 98.]
392 cord_individual_obj[indivial_i, :] = [ 18. 9. 133. 142.]
393 cord_individual_obj[indivial_i, :] = [ 19. 10. 63. 73.]
394 cord_individual_obj[indivial_i, :] = [ 20. 9. 121. 130.]
395 cord_individual_obj[indivial_i, :] = [ 21. 10. 165. 175.]
396 cord_individual_obj[indivial_i, :] = [ 22. 11. 101. 112.]
397 cord_individual_obj[indivial_i, :] = [ 23. 11. 192. 203.]
398 cord_individual_obj[indivial_i, :] = [ 24. 12. 108. 120.]
399
400 min(cord_individual_obj[:, 3]) = 73.0
401 histol_G_best_iter[iter, 3] = 73.0
402 Begin iteration:
403
404 iter = 12
405 cord_individual_obj[indivial_i, :] = [ 0. 10. 124. 134.]
406 cord_individual_obj[indivial_i, :] = [ 1. 8. 134. 142.]
407 cord_individual_obj[indivial_i, :] = [ 2. 10. 155. 165.]
408 cord_individual_obj[indivial_i, :] = [ 3. 9. 173. 182.]
409 cord_individual_obj[indivial_i, :] = [ 4. 9. 172. 181.]
410 cord_individual_obj[indivial_i, :] = [ 5. 10. 108. 118.]
411 cord_individual_obj[indivial_i, :] = [ 6. 11. 142. 153.]
412 cord_individual_obj[indivial_i, :] = [ 7. 11. 108. 119.]
413 cord_individual_obj[indivial_i, :] = [ 8. 7. 139. 146.]
414 cord_individual_obj[indivial_i, :] = [ 9. 11. 120. 131.]
415 cord_individual_obj[indivial_i, :] = [ 10. 10. 158. 168.]

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416 cord_individual_obj[indivial_i,:] = [ 11. 10. 159. 169.]
417 cord_individual_obj[indivial_i,:] = [ 12. 10. 124. 134.]
418 cord_individual_obj[indivial_i,:] = [ 13. 12. 138. 150.]
419 cord_individual_obj[indivial_i,:] = [ 14. 10. 116. 126.]
420 cord_individual_obj[indivial_i,:] = [ 15. 11. 122. 133.]
421 cord_individual_obj[indivial_i,:] = [ 16. 9. 113. 122.]
422 cord_individual_obj[indivial_i,:] = [ 17. 14. 127. 141.]
423 cord_individual_obj[indivial_i,:] = [ 18. 11. 107. 118.]
424 cord_individual_obj[indivial_i,:] = [ 19. 11. 120. 131.]
425 cord_individual_obj[indivial_i,:] = [ 20. 8. 118. 126.]
426 cord_individual_obj[indivial_i,:] = [ 21. 7. 125. 132.]
427 cord_individual_obj[indivial_i,:] = [ 22. 10. 131. 141.]
428 cord_individual_obj[indivial_i,:] = [ 23. 10. 63. 73.]
429 cord_individual_obj[indivial_i,:] = [ 24. 10. 113. 123.]
430
431 min(cord_individual_obj[:,3]) = 73.0
432 histol_G_best_iter[iter,3] = 73.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [ 0. 9. 154. 163.]
437 cord_individual_obj[indivial_i,:] = [ 1. 12. 117. 129.]
438 cord_individual_obj[indivial_i,:] = [ 2. 10. 149. 159.]
439 cord_individual_obj[indivial_i,:] = [ 3. 10. 63. 73.]
440 cord_individual_obj[indivial_i,:] = [ 4. 10. 107. 117.]
441 cord_individual_obj[indivial_i,:] = [ 5. 9. 131. 140.]
442 cord_individual_obj[indivial_i,:] = [ 6. 14. 141. 155.]
443 cord_individual_obj[indivial_i,:] = [ 7. 12. 126. 138.]
444 cord_individual_obj[indivial_i,:] = [ 8. 10. 99. 109.]
445 cord_individual_obj[indivial_i,:] = [ 9. 9. 172. 181.]
446 cord_individual_obj[indivial_i,:] = [ 10. 10. 130. 140.]
447 cord_individual_obj[indivial_i,:] = [ 11. 11. 125. 136.]
448 cord_individual_obj[indivial_i,:] = [ 12. 10. 159. 169.]
449 cord_individual_obj[indivial_i,:] = [ 13. 11. 148. 159.]
450 cord_individual_obj[indivial_i,:] = [ 14. 11. 126. 137.]
451 cord_individual_obj[indivial_i,:] = [ 15. 11. 162. 173.]
452 cord_individual_obj[indivial_i,:] = [ 16. 11. 99. 110.]
453 cord_individual_obj[indivial_i,:] = [ 17. 10. 100. 110.]
454 cord_individual_obj[indivial_i,:] = [ 18. 10. 124. 134.]
455 cord_individual_obj[indivial_i,:] = [ 19. 8. 171. 179.]
456 cord_individual_obj[indivial_i,:] = [ 20. 12. 120. 132.]
457 cord_individual_obj[indivial_i,:] = [ 21. 10. 83. 93.]
458 cord_individual_obj[indivial_i,:] = [ 22. 12. 170. 182.]
459 cord_individual_obj[indivial_i,:] = [ 23. 9. 103. 112.]
460 cord_individual_obj[indivial_i,:] = [ 24. 8. 106. 114.]
461
462 min(cord_individual_obj[:,3]) = 73.0
463 histol_G_best_iter[iter,3] = 73.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [ 0. 9. 128. 137.]
468 cord_individual_obj[indivial_i,:] = [ 1. 9. 123. 132.]
469 cord_individual_obj[indivial_i,:] = [ 2. 8. 110. 118.]
470 cord_individual_obj[indivial_i,:] = [ 3. 9. 143. 152.]
471 cord_individual_obj[indivial_i,:] = [ 4. 9. 71. 80.]
472 cord_individual_obj[indivial_i,:] = [ 5. 12. 249. 261.]
473 cord_individual_obj[indivial_i,:] = [ 6. 9. 118. 127.]
474 cord_individual_obj[indivial_i,:] = [ 7. 11. 164. 175.]
475 cord_individual_obj[indivial_i,:] = [ 8. 9. 145. 154.]
476 cord_individual_obj[indivial_i,:] = [ 9. 11. 99. 110.]
477 cord_individual_obj[indivial_i,:] = [ 10. 10. 102. 112.]
478 cord_individual_obj[indivial_i,:] = [ 11. 10. 104. 114.]
479 cord_individual_obj[indivial_i,:] = [ 12. 11. 138. 149.]
480 cord_individual_obj[indivial_i,:] = [ 13. 10. 92. 102.]
481 cord_individual_obj[indivial_i,:] = [ 14. 11. 133. 144.]
482 cord_individual_obj[indivial_i,:] = [ 15. 11. 142. 153.]
483 cord_individual_obj[indivial_i,:] = [ 16. 9. 118. 127.]
484 cord_individual_obj[indivial_i,:] = [ 17. 14. 143. 157.]
485 cord_individual_obj[indivial_i,:] = [ 18. 10. 149. 159.]
486 cord_individual_obj[indivial_i,:] = [ 19. 10. 112. 122.]
487 cord_individual_obj[indivial_i,:] = [ 20. 11. 134. 145.]
488 cord_individual_obj[indivial_i,:] = [ 21. 9. 152. 161.]
489 cord_individual_obj[indivial_i,:] = [ 22. 10. 63. 73.]
490 cord_individual_obj[indivial_i,:] = [ 23. 10. 115. 125.]
491 cord_individual_obj[indivial_i,:] = [ 24. 9. 146. 155.]
492
493 min(cord_individual_obj[:,3]) = 73.0
494 histol_G_best_iter[iter,3] = 73.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [ 0. 11. 94. 105.]
499 cord_individual_obj[indivial_i,:] = [ 1. 9. 129. 138.]

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500 cord_individual_obj[indivial_i,:] = [ 2. 11. 105. 116.]
501 cord_individual_obj[indivial_i,:] = [ 3. 11. 176. 187.]
502 cord_individual_obj[indivial_i,:] = [ 4. 9. 144. 153.]
503 cord_individual_obj[indivial_i,:] = [ 5. 10. 63. 73.]
504 cord_individual_obj[indivial_i,:] = [ 6. 9. 177. 186.]
505 cord_individual_obj[indivial_i,:] = [ 7. 12. 92. 104.]
506 cord_individual_obj[indivial_i,:] = [ 8. 10. 119. 129.]
507 cord_individual_obj[indivial_i,:] = [ 9. 10. 113. 123.]
508 cord_individual_obj[indivial_i,:] = [ 10. 9. 167. 176.]
509 cord_individual_obj[indivial_i,:] = [ 11. 9. 160. 169.]
510 cord_individual_obj[indivial_i,:] = [ 12. 13. 161. 174.]
511 cord_individual_obj[indivial_i,:] = [ 13. 10. 104. 114.]
512 cord_individual_obj[indivial_i,:] = [ 14. 9. 122. 131.]
513 cord_individual_obj[indivial_i,:] = [ 15. 10. 123. 133.]
514 cord_individual_obj[indivial_i,:] = [ 16. 10. 86. 96.]
515 cord_individual_obj[indivial_i,:] = [ 17. 10. 184. 194.]
516 cord_individual_obj[indivial_i,:] = [ 18. 8. 135. 143.]
517 cord_individual_obj[indivial_i,:] = [ 19. 13. 149. 162.]
518 cord_individual_obj[indivial_i,:] = [ 20. 10. 171. 181.]
519 cord_individual_obj[indivial_i,:] = [ 21. 9. 152. 161.]
520 cord_individual_obj[indivial_i,:] = [ 22. 11. 100. 111.]
521 cord_individual_obj[indivial_i,:] = [ 23. 11. 133. 144.]
522 cord_individual_obj[indivial_i,:] = [ 24. 9. 146. 155.]
523
524 min(cord_individual_obj[:, 3]) = 73.0
525 histol_G_best_iter[iter, 3] = 73.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i,:] = [ 0. 9. 116. 125.]
530 cord_individual_obj[indivial_i,:] = [ 1. 10. 117. 127.]
531 cord_individual_obj[indivial_i,:] = [ 2. 11. 149. 160.]
532 cord_individual_obj[indivial_i,:] = [ 3. 12. 168. 180.]
533 cord_individual_obj[indivial_i,:] = [ 4. 9. 168. 177.]
534 cord_individual_obj[indivial_i,:] = [ 5. 10. 139. 149.]
535 cord_individual_obj[indivial_i,:] = [ 6. 9. 128. 137.]
536 cord_individual_obj[indivial_i,:] = [ 7. 12. 161. 173.]
537 cord_individual_obj[indivial_i,:] = [ 8. 9. 141. 150.]
538 cord_individual_obj[indivial_i,:] = [ 9. 9. 165. 174.]
539 cord_individual_obj[indivial_i,:] = [ 10. 12. 150. 162.]
540 cord_individual_obj[indivial_i,:] = [ 11. 11. 183. 194.]
541 cord_individual_obj[indivial_i,:] = [ 12. 10. 137. 147.]
542 cord_individual_obj[indivial_i,:] = [ 13. 11. 154. 165.]
543 cord_individual_obj[indivial_i,:] = [ 14. 12. 138. 150.]
544 cord_individual_obj[indivial_i,:] = [ 15. 9. 176. 185.]
545 cord_individual_obj[indivial_i,:] = [ 16. 11. 153. 164.]
546 cord_individual_obj[indivial_i,:] = [ 17. 10. 63. 73.]
547 cord_individual_obj[indivial_i,:] = [ 18. 12. 85. 97.]
548 cord_individual_obj[indivial_i,:] = [ 19. 8. 155. 163.]
549 cord_individual_obj[indivial_i,:] = [ 20. 9. 138. 147.]
550 cord_individual_obj[indivial_i,:] = [ 21. 7. 142. 149.]
551 cord_individual_obj[indivial_i,:] = [ 22. 14. 136. 150.]
552 cord_individual_obj[indivial_i,:] = [ 23. 11. 154. 165.]
553 cord_individual_obj[indivial_i,:] = [ 24. 9. 124. 133.]
554
555 min(cord_individual_obj[:, 3]) = 73.0
556 histol_G_best_iter[iter, 3] = 73.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i,:] = [ 0. 10. 146. 156.]
561 cord_individual_obj[indivial_i,:] = [ 1. 9. 96. 105.]
562 cord_individual_obj[indivial_i,:] = [ 2. 12. 105. 117.]
563 cord_individual_obj[indivial_i,:] = [ 3. 13. 133. 146.]
564 cord_individual_obj[indivial_i,:] = [ 4. 13. 121. 134.]
565 cord_individual_obj[indivial_i,:] = [ 5. 9. 147. 156.]
566 cord_individual_obj[indivial_i,:] = [ 6. 10. 159. 169.]
567 cord_individual_obj[indivial_i,:] = [ 7. 11. 96. 107.]
568 cord_individual_obj[indivial_i,:] = [ 8. 11. 101. 112.]
569 cord_individual_obj[indivial_i,:] = [ 9. 9. 98. 107.]
570 cord_individual_obj[indivial_i,:] = [ 10. 9. 134. 143.]
571 cord_individual_obj[indivial_i,:] = [ 11. 10. 63. 73.]
572 cord_individual_obj[indivial_i,:] = [ 12. 10. 163. 173.]
573 cord_individual_obj[indivial_i,:] = [ 13. 9. 179. 188.]
574 cord_individual_obj[indivial_i,:] = [ 14. 11. 92. 103.]
575 cord_individual_obj[indivial_i,:] = [ 15. 10. 165. 175.]
576 cord_individual_obj[indivial_i,:] = [ 16. 9. 100. 109.]
577 cord_individual_obj[indivial_i,:] = [ 17. 9. 138. 147.]
578 cord_individual_obj[indivial_i,:] = [ 18. 10. 135. 145.]
579 cord_individual_obj[indivial_i,:] = [ 19. 9. 157. 166.]
580 cord_individual_obj[indivial_i,:] = [ 20. 13. 158. 171.]
581 cord_individual_obj[indivial_i,:] = [ 21. 11. 161. 172.]
582 cord_individual_obj[indivial_i,:] = [ 22. 12. 128. 140.]
583 cord_individual_obj[indivial_i,:] = [ 23. 9. 111. 120.]

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584     cord_individual_obj[indivial_i, :] = [ 24. 10. 109. 119.]
585
586     min(cord_individual_obj[:, 3]) = 73.0
587     historl_G_best_iter[iter, 3] = 73.0
588 Begin iteration:
589 iter = 18
590     cord_individual_obj[indivial_i, :] = [ 0. 9. 132. 141.]
591     cord_individual_obj[indivial_i, :] = [ 1. 11. 127. 138.]
592     cord_individual_obj[indivial_i, :] = [ 2. 10. 121. 131.]
593     cord_individual_obj[indivial_i, :] = [ 3. 10. 137. 147.]
594     cord_individual_obj[indivial_i, :] = [ 4. 12. 148. 160.]
595     cord_individual_obj[indivial_i, :] = [ 5. 8. 150. 158.]
596     cord_individual_obj[indivial_i, :] = [ 6. 10. 90. 100.]
597     cord_individual_obj[indivial_i, :] = [ 7. 9. 72. 81.]
598     cord_individual_obj[indivial_i, :] = [ 8. 10. 108. 118.]
599     cord_individual_obj[indivial_i, :] = [ 9. 9. 195. 204.]
600     cord_individual_obj[indivial_i, :] = [ 10. 11. 152. 163.]
601     cord_individual_obj[indivial_i, :] = [ 11. 11. 126. 137.]
602     cord_individual_obj[indivial_i, :] = [ 12. 12. 142. 154.]
603     cord_individual_obj[indivial_i, :] = [ 13. 10. 63. 73.]
604     cord_individual_obj[indivial_i, :] = [ 14. 11. 80. 91.]
605     cord_individual_obj[indivial_i, :] = [ 15. 12. 196. 208.]
606     cord_individual_obj[indivial_i, :] = [ 16. 10. 150. 160.]
607     cord_individual_obj[indivial_i, :] = [ 17. 12. 170. 182.]
608     cord_individual_obj[indivial_i, :] = [ 18. 8. 170. 178.]
609     cord_individual_obj[indivial_i, :] = [ 19. 10. 132. 142.]
610     cord_individual_obj[indivial_i, :] = [ 20. 10. 151. 161.]
611     cord_individual_obj[indivial_i, :] = [ 21. 8. 86. 94.]
612     cord_individual_obj[indivial_i, :] = [ 22. 10. 153. 163.]
613     cord_individual_obj[indivial_i, :] = [ 23. 9. 189. 198.]
614     cord_individual_obj[indivial_i, :] = [ 24. 11. 119. 130.]
615
616
617     min(cord_individual_obj[:, 3]) = 73.0
618     historl_G_best_iter[iter, 3] = 73.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0. 10. 107. 117.]
623     cord_individual_obj[indivial_i, :] = [ 1. 11. 136. 147.]
624     cord_individual_obj[indivial_i, :] = [ 2. 10. 127. 137.]
625     cord_individual_obj[indivial_i, :] = [ 3. 11. 153. 164.]
626     cord_individual_obj[indivial_i, :] = [ 4. 10. 164. 174.]
627     cord_individual_obj[indivial_i, :] = [ 5. 9. 190. 199.]
628     cord_individual_obj[indivial_i, :] = [ 6. 11. 142. 153.]
629     cord_individual_obj[indivial_i, :] = [ 7. 13. 108. 121.]
630     cord_individual_obj[indivial_i, :] = [ 8. 10. 125. 135.]
631     cord_individual_obj[indivial_i, :] = [ 9. 9. 115. 124.]
632     cord_individual_obj[indivial_i, :] = [ 10. 11. 102. 113.]
633     cord_individual_obj[indivial_i, :] = [ 11. 9. 103. 112.]
634     cord_individual_obj[indivial_i, :] = [ 12. 11. 156. 167.]
635     cord_individual_obj[indivial_i, :] = [ 13. 13. 127. 140.]
636     cord_individual_obj[indivial_i, :] = [ 14. 11. 152. 163.]
637     cord_individual_obj[indivial_i, :] = [ 15. 10. 63. 73.]
638     cord_individual_obj[indivial_i, :] = [ 16. 10. 95. 105.]
639     cord_individual_obj[indivial_i, :] = [ 17. 12. 116. 128.]
640     cord_individual_obj[indivial_i, :] = [ 18. 11. 127. 138.]
641     cord_individual_obj[indivial_i, :] = [ 19. 10. 133. 143.]
642     cord_individual_obj[indivial_i, :] = [ 20. 10. 166. 176.]
643     cord_individual_obj[indivial_i, :] = [ 21. 10. 163. 173.]
644     cord_individual_obj[indivial_i, :] = [ 22. 12. 148. 160.]
645     cord_individual_obj[indivial_i, :] = [ 23. 9. 105. 114.]
646     cord_individual_obj[indivial_i, :] = [ 24. 9. 122. 131.]
647
648     min(cord_individual_obj[:, 3]) = 73.0
649     historl_G_best_iter[iter, 3] = 73.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0. 10. 132. 142.]
654     cord_individual_obj[indivial_i, :] = [ 1. 9. 78. 87.]
655     cord_individual_obj[indivial_i, :] = [ 2. 9. 135. 144.]
656     cord_individual_obj[indivial_i, :] = [ 3. 11. 71. 82.]
657     cord_individual_obj[indivial_i, :] = [ 4. 9. 142. 151.]
658     cord_individual_obj[indivial_i, :] = [ 5. 10. 63. 73.]
659     cord_individual_obj[indivial_i, :] = [ 6. 14. 131. 145.]
660     cord_individual_obj[indivial_i, :] = [ 7. 11. 105. 116.]
661     cord_individual_obj[indivial_i, :] = [ 8. 9. 94. 103.]
662     cord_individual_obj[indivial_i, :] = [ 9. 10. 97. 107.]
663     cord_individual_obj[indivial_i, :] = [ 10. 10. 68. 78.]
664     cord_individual_obj[indivial_i, :] = [ 11. 13. 118. 131.]
665     cord_individual_obj[indivial_i, :] = [ 12. 9. 107. 116.]
666     cord_individual_obj[indivial_i, :] = [ 13. 10. 142. 152.]
667     cord_individual_obj[indivial_i, :] = [ 14. 13. 127. 140.]

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668 cord_individual_obj[indivial_i,:] = [ 15. 9. 128. 137.]
669 cord_individual_obj[indivial_i,:] = [ 16. 9. 142. 151.]
670 cord_individual_obj[indivial_i,:] = [ 17. 12. 96. 108.]
671 cord_individual_obj[indivial_i,:] = [ 18. 11. 122. 133.]
672 cord_individual_obj[indivial_i,:] = [ 19. 9. 163. 172.]
673 cord_individual_obj[indivial_i,:] = [ 20. 12. 149. 161.]
674 cord_individual_obj[indivial_i,:] = [ 21. 9. 134. 143.]
675 cord_individual_obj[indivial_i,:] = [ 22. 12. 137. 149.]
676 cord_individual_obj[indivial_i,:] = [ 23. 9. 111. 120.]
677 cord_individual_obj[indivial_i,:] = [ 24. 9. 129. 138.]
678
679 min(cord_individual_obj[:, 3]) = 73.0
680 historl_G_best_iter[iter, 3] = 73.0
681 Iteration calculate over
682
683
684
685
686 All item are in Bin and:
687 Bin area = 1080
688 Real_area = 213.0
689 Proportion_of_area = 0.19722222222222222222
690 BEST_CHROM =
691 berth: [24.5 3.5 17. 18.5 4. 15.5 9. 13.5 15.5 22.5 24. 7. 9. 12.5
692 12.5 9.5 2.5 22.5]
693 time: [2. 0. 0. 5. 9. 3. 3. 5. 7. 0. 4. 5. 0. 1. 0. 7. 4. 8.]
694 num_QC: [3. 2. 3. 2. 3. 4. 2. 5. 3. 3. 2. 4. 3. 2. 3. 4. 2. 2.]
695 Objective function values and some other indicators:
696 Obj0 = 10.00      Obj1 = 63.00      Obj0 + Obj1 = 73.00
697 Total movement of crane: 0.00
698 Total waiting time in berth position: 63.00
699 Total index of q during berthing: 1123.00
700 Specific arrangement for each vessel:
701 V_id: 0          li: 9.0           xi: 24.5           bow of i: 20.0           tail of i: 29.0           gama_i0: 2.0           gama_i1: 3
702 .0              gama_i1 + 1: 4.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 120.0           work
703 load_i: 120.0   work load gap_i: 0
704 V_id: 1          li: 7.0           xi: 3.5            bow of i: 0.0           tail of i: 7.0           gama_i0: 0.0           gama_i1: 3.0
705 .0              gama_i1 + 1: 4.0       gama_i1 - gama_i0: 3.0           duration_time_i: 4.0           demand_i: 160.0           work load_i:
706 160.0           work load gap_i: 0
707 V_id: 2          li: 6.0           xi: 17.0           bow of i: 14.0           tail of i: 20.0           gama_i0: 0.0           gama_i1: 1
708 .0              gama_i1 + 1: 2.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 80.0           work
709 load_i: 80.0    work load gap_i: 0
710 V_id: 3          li: 3.0           xi: 18.5           bow of i: 17.0           tail of i: 20.0           gama_i0: 5.0           gama_i1: 8
711 .0              gama_i1 + 1: 9.0       gama_i1 - gama_i0: 3.0           duration_time_i: 4.0           demand_i: 140.0           work
712 load_i: 140.0   work load gap_i: 0
713 V_id: 4          li: 8.0           xi: 4.0            bow of i: 0.0           tail of i: 8.0           gama_i0: 9.0           gama_i1: 10.0
714 .0              gama_i1 + 1: 11.0      gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 80.0           work
715 load_i: 80.0    work load gap_i: 0
716 V_id: 5          li: 9.0           xi: 15.5           bow of i: 11.0           tail of i: 20.0           gama_i0: 3.0           gama_i1: 4
717 .0              gama_i1 + 1: 5.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 140.0           work
718 load_i: 140.0   work load gap_i: 0
719 V_id: 6          li: 4.0           xi: 9.0            bow of i: 7.0           tail of i: 11.0           gama_i0: 3.0           gama_i1: 4.0
720 .0              gama_i1 + 1: 5.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 60.0           work load_i:
721 load_i: 60.0    work load gap_i: 0
722 V_id: 7          li: 5.0           xi: 13.5           bow of i: 11.0           tail of i: 16.0           gama_i0: 5.0           gama_i1: 6
723 .0              gama_i1 + 1: 7.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 160.0           work
724 load_i: 160.0   work load gap_i: 0
725 V_id: 8          li: 3.0           xi: 15.5           bow of i: 14.0           tail of i: 17.0           gama_i0: 7.0           gama_i1: 8
726 .0              gama_i1 + 1: 9.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 120.0           work
727 load_i: 120.0   work load gap_i: 0
728 V_id: 9          li: 5.0           xi: 22.5           bow of i: 20.0           tail of i: 25.0           gama_i0: 0.0           gama_i1: 1
729 .0              gama_i1 + 1: 2.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 80.0           work
730 load_i: 80.0    work load gap_i: 0
731 V_id: 10         li: 8.0           xi: 24.0           bow of i: 20.0           tail of i: 28.0           gama_i0: 4.0           gama_i1: 1
732 .0              gama_i1 + 1: 8.0       gama_i1 - gama_i0: 3.0           duration_time_i: 4.0           demand_i: 140.0           work
733 load_i: 140.0   work load gap_i: 0
734 V_id: 11         li: 4.0           xi: 7.0            bow of i: 5.0           tail of i: 9.0           gama_i0: 5.0           gama_i1: 6.0
735 .0              gama_i1 + 1: 7.0       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: 4.0           xi: 9.0            bow of i: 7.0           tail of i: 11.0           gama_i0: 0.0           gama_i1: 2
738 .0              gama_i1 + 1: 3.0       gama_i1 - gama_i0: 2.0           duration_time_i: 3.0           demand_i: 140.0           work
739 load_i: 140.0   work load gap_i: 0
740 V_id: 13         li: 3.0           xi: 12.5           bow of i: 11.0           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: 80.0           work
742 load_i: 80.0    work load gap_i: 0
743 V_id: 14         li: 3.0           xi: 12.5           bow of i: 11.0           tail of i: 14.0           gama_i0: 0.0           gama_i1: 1
744 .0              gama_i1 + 1: 1.0       gama_i1 - gama_i0: 0.0           duration_time_i: 1.0           demand_i: 60.0           work
745 load_i: 60.0    work load gap_i: 0
746 V_id: 15         li: 9.0           xi: 9.5            bow of i: 5.0           tail of i: 14.0           gama_i0: 7.0           gama_i1: 8
747 .0              gama_i1 + 1: 9.0       gama_i1 - gama_i0: 1.0           duration_time_i: 2.0           demand_i: 100.0           work
748 load_i: 100.0   work load gap_i: 0
749 V_id: 16         li: 5.0           xi: 2.5            bow of i: 0.0           tail of i: 5.0           gama_i0: 4.0           gama_i1: 7.0
750 .0              gama_i1 + 1: 8.0       gama_i1 - gama_i0: 3.0           duration_time_i: 4.0           demand_i: 140.0           work load_i:
751 load_i: 140.0   work load gap_i: 0

```

unknown

718	V_id: 17	li: 5.0	xi: 22.5	bow of i: 20.0	tail of i: 25.0	gama_i0: 8.0	gama_i1
	: 9.0	gama_i1 + 1: 10.0		gama_i1 - gama_i0: 1.0		demand_i: 80.0	work
	load_i: 80.0		work load gap_i: 0				

719

720 Algorithm finished and the total CPU time: 518 s

721 End

722