

unknown

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80 cord_individual_obj[indivial_i,:] = [ 16. 8. 99. 107.]
81 cord_individual_obj[indivial_i,:] = [17. 8. 78. 86.]
82 cord_individual_obj[indivial_i,:] = [18. 10. 65. 75.]
83 cord_individual_obj[indivial_i,:] = [ 19. 10. 93. 103.]
84 cord_individual_obj[indivial_i,:] = [20. 7. 92. 99.]
85 cord_individual_obj[indivial_i,:] = [21. 8. 89. 97.]
86 cord_individual_obj[indivial_i,:] = [ 22. 7. 130. 137.]
87 cord_individual_obj[indivial_i,:] = [23. 8. 89. 97.]
88 cord_individual_obj[indivial_i,:] = [ 24. 7. 93. 100.]
89
90 min(cord_individual_obj[:,3]) = 56.0
91 historl_G_best_iter[iter, 3] = 56.0
92 Begin iteration:
93
94 iter = 2
95 cord_individual_obj[indivial_i,:] = [ 0. 7. 117. 124.]
96 cord_individual_obj[indivial_i,:] = [ 1. 7. 50. 57.]
97 cord_individual_obj[indivial_i,:] = [ 2. 10. 136. 146.]
98 cord_individual_obj[indivial_i,:] = [ 3. 9. 100. 109.]
99 cord_individual_obj[indivial_i,:] = [ 4. 8. 64. 72.]
100 cord_individual_obj[indivial_i,:] = [ 5. 9. 53. 62.]
101 cord_individual_obj[indivial_i,:] = [ 6. 8. 48. 56.]
102 cord_individual_obj[indivial_i,:] = [ 7. 9. 60. 69.]
103 cord_individual_obj[indivial_i,:] = [ 8. 8. 71. 79.]
104 cord_individual_obj[indivial_i,:] = [ 9. 6. 68. 74.]
105 cord_individual_obj[indivial_i,:] = [10. 8. 76. 84.]
106 cord_individual_obj[indivial_i,:] = [11. 11. 114. 125.]
107 cord_individual_obj[indivial_i,:] = [12. 8. 91. 99.]
108 cord_individual_obj[indivial_i,:] = [13. 6. 42. 48.]
109 cord_individual_obj[indivial_i,:] = [14. 8. 74. 82.]
110 cord_individual_obj[indivial_i,:] = [15. 7. 135. 142.]
111 cord_individual_obj[indivial_i,:] = [16. 10. 61. 71.]
112 cord_individual_obj[indivial_i,:] = [17. 7. 57. 64.]
113 cord_individual_obj[indivial_i,:] = [18. 10. 63. 73.]
114 cord_individual_obj[indivial_i,:] = [19. 8. 84. 92.]
115 cord_individual_obj[indivial_i,:] = [20. 7. 121. 128.]
116 cord_individual_obj[indivial_i,:] = [21. 9. 93. 102.]
117 cord_individual_obj[indivial_i,:] = [22. 9. 93. 102.]
118 cord_individual_obj[indivial_i,:] = [23. 9. 115. 124.]
119 cord_individual_obj[indivial_i,:] = [24. 9. 155. 164.]
120
121 min(cord_individual_obj[:,3]) = 48.0
122 historl_G_best_iter[iter, 3] = 48.0
123 Begin iteration:
124
125 iter = 3
126 cord_individual_obj[indivial_i,:] = [ 0. 9. 103. 112.]
127 cord_individual_obj[indivial_i,:] = [ 1. 7. 149. 156.]
128 cord_individual_obj[indivial_i,:] = [ 2. 9. 112. 121.]
129 cord_individual_obj[indivial_i,:] = [ 3. 8. 62. 70.]
130 cord_individual_obj[indivial_i,:] = [ 4. 8. 80. 88.]
131 cord_individual_obj[indivial_i,:] = [ 5. 9. 83. 92.]
132 cord_individual_obj[indivial_i,:] = [ 6. 8. 65. 73.]
133 cord_individual_obj[indivial_i,:] = [ 7. 11. 75. 86.]
134 cord_individual_obj[indivial_i,:] = [ 8. 9. 137. 146.]
135 cord_individual_obj[indivial_i,:] = [ 9. 7. 125. 132.]
136 cord_individual_obj[indivial_i,:] = [10. 8. 101. 109.]
137 cord_individual_obj[indivial_i,:] = [11. 9. 77. 86.]
138 cord_individual_obj[indivial_i,:] = [12. 8. 83. 91.]
139 cord_individual_obj[indivial_i,:] = [13. 9. 84. 93.]
140 cord_individual_obj[indivial_i,:] = [14. 8. 107. 115.]
141 cord_individual_obj[indivial_i,:] = [15. 6. 90. 96.]
142 cord_individual_obj[indivial_i,:] = [16. 9. 150. 159.]
143 cord_individual_obj[indivial_i,:] = [17. 8. 59. 67.]
144 cord_individual_obj[indivial_i,:] = [18. 9. 106. 115.]
145 cord_individual_obj[indivial_i,:] = [19. 10. 55. 65.]
146 cord_individual_obj[indivial_i,:] = [20. 10. 95. 105.]
147 cord_individual_obj[indivial_i,:] = [21. 8. 115. 123.]
148 cord_individual_obj[indivial_i,:] = [22. 8. 122. 130.]
149 cord_individual_obj[indivial_i,:] = [23. 9. 146. 155.]
150 cord_individual_obj[indivial_i,:] = [24. 6. 42. 48.]
151
152 min(cord_individual_obj[:,3]) = 48.0
153 historl_G_best_iter[iter, 3] = 48.0
154 Begin iteration:
155
156 iter = 4
157 cord_individual_obj[indivial_i,:] = [ 0. 9. 135. 144.]
158 cord_individual_obj[indivial_i,:] = [ 1. 9. 68. 77.]
159 cord_individual_obj[indivial_i,:] = [ 2. 9. 152. 161.]
160 cord_individual_obj[indivial_i,:] = [ 3. 7. 151. 158.]
161 cord_individual_obj[indivial_i,:] = [ 4. 8. 138. 146.]
162 cord_individual_obj[indivial_i,:] = [ 5. 9. 82. 91.]
163 cord_individual_obj[indivial_i,:] = [ 6. 7. 123. 130.]

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164 cord_individual_obj[indivial_i,:] = [ 7. 8. 131. 139.]
165 cord_individual_obj[indivial_i,:] = [ 8. 7. 149. 156.]
166 cord_individual_obj[indivial_i,:] = [ 9. 10. 62. 72.]
167 cord_individual_obj[indivial_i,:] = [10. 7. 84. 91.]
168 cord_individual_obj[indivial_i,:] = [11. 12. 98. 110.]
169 cord_individual_obj[indivial_i,:] = [12. 9. 181. 190.]
170 cord_individual_obj[indivial_i,:] = [13. 7. 116. 123.]
171 cord_individual_obj[indivial_i,:] = [14. 8. 64. 72.]
172 cord_individual_obj[indivial_i,:] = [15. 10. 100. 110.]
173 cord_individual_obj[indivial_i,:] = [16. 6. 42. 48.]
174 cord_individual_obj[indivial_i,:] = [17. 7. 100. 107.]
175 cord_individual_obj[indivial_i,:] = [18. 8. 103. 111.]
176 cord_individual_obj[indivial_i,:] = [19. 7. 108. 115.]
177 cord_individual_obj[indivial_i,:] = [20. 7. 114. 121.]
178 cord_individual_obj[indivial_i,:] = [21. 7. 161. 168.]
179 cord_individual_obj[indivial_i,:] = [22. 10. 153. 163.]
180 cord_individual_obj[indivial_i,:] = [23. 8. 101. 109.]
181 cord_individual_obj[indivial_i,:] = [24. 8. 97. 105.]
182
183 min(cord_individual_obj[:,3]) = 48.0
184 historl_G_best_iter[iter,3] = 48.0
185 Begin iteration:
186
187 iter = 5
188 cord_individual_obj[indivial_i,:] = [ 0. 9. 101. 110.]
189 cord_individual_obj[indivial_i,:] = [ 1. 7. 74. 81.]
190 cord_individual_obj[indivial_i,:] = [ 2. 9. 134. 143.]
191 cord_individual_obj[indivial_i,:] = [ 3. 7. 80. 87.]
192 cord_individual_obj[indivial_i,:] = [ 4. 8. 143. 151.]
193 cord_individual_obj[indivial_i,:] = [ 5. 6. 167. 173.]
194 cord_individual_obj[indivial_i,:] = [ 6. 9. 102. 111.]
195 cord_individual_obj[indivial_i,:] = [ 7. 7. 122. 129.]
196 cord_individual_obj[indivial_i,:] = [ 8. 9. 126. 135.]
197 cord_individual_obj[indivial_i,:] = [ 9. 8. 71. 79.]
198 cord_individual_obj[indivial_i,:] = [10. 9. 131. 140.]
199 cord_individual_obj[indivial_i,:] = [11. 7. 133. 140.]
200 cord_individual_obj[indivial_i,:] = [12. 6. 42. 48.]
201 cord_individual_obj[indivial_i,:] = [13. 9. 95. 104.]
202 cord_individual_obj[indivial_i,:] = [14. 8. 158. 166.]
203 cord_individual_obj[indivial_i,:] = [15. 7. 87. 94.]
204 cord_individual_obj[indivial_i,:] = [16. 9. 118. 127.]
205 cord_individual_obj[indivial_i,:] = [17. 7. 77. 84.]
206 cord_individual_obj[indivial_i,:] = [18. 7. 93. 100.]
207 cord_individual_obj[indivial_i,:] = [19. 8. 71. 79.]
208 cord_individual_obj[indivial_i,:] = [20. 9. 143. 152.]
209 cord_individual_obj[indivial_i,:] = [21. 8. 70. 78.]
210 cord_individual_obj[indivial_i,:] = [22. 7. 184. 191.]
211 cord_individual_obj[indivial_i,:] = [23. 9. 82. 91.]
212 cord_individual_obj[indivial_i,:] = [24. 7. 82. 89.]
213
214 min(cord_individual_obj[:,3]) = 48.0
215 historl_G_best_iter[iter,3] = 48.0
216 Begin iteration:
217
218 iter = 6
219 cord_individual_obj[indivial_i,:] = [ 0. 11. 120. 131.]
220 cord_individual_obj[indivial_i,:] = [ 1. 9. 117. 126.]
221 cord_individual_obj[indivial_i,:] = [ 2. 8. 98. 106.]
222 cord_individual_obj[indivial_i,:] = [ 3. 10. 90. 100.]
223 cord_individual_obj[indivial_i,:] = [ 4. 9. 98. 107.]
224 cord_individual_obj[indivial_i,:] = [ 5. 7. 95. 102.]
225 cord_individual_obj[indivial_i,:] = [ 6. 7. 89. 96.]
226 cord_individual_obj[indivial_i,:] = [ 7. 10. 74. 84.]
227 cord_individual_obj[indivial_i,:] = [ 8. 7. 151. 158.]
228 cord_individual_obj[indivial_i,:] = [ 9. 7. 83. 90.]
229 cord_individual_obj[indivial_i,:] = [10. 9. 87. 96.]
230 cord_individual_obj[indivial_i,:] = [11. 8. 133. 141.]
231 cord_individual_obj[indivial_i,:] = [12. 8. 106. 114.]
232 cord_individual_obj[indivial_i,:] = [13. 9. 120. 129.]
233 cord_individual_obj[indivial_i,:] = [14. 8. 66. 74.]
234 cord_individual_obj[indivial_i,:] = [15. 9. 80. 89.]
235 cord_individual_obj[indivial_i,:] = [16. 8. 156. 164.]
236 cord_individual_obj[indivial_i,:] = [17. 6. 79. 85.]
237 cord_individual_obj[indivial_i,:] = [18. 8. 90. 98.]
238 cord_individual_obj[indivial_i,:] = [19. 8. 93. 101.]
239 cord_individual_obj[indivial_i,:] = [20. 7. 99. 106.]
240 cord_individual_obj[indivial_i,:] = [21. 7. 59. 66.]
241 cord_individual_obj[indivial_i,:] = [22. 6. 42. 48.]
242 cord_individual_obj[indivial_i,:] = [23. 8. 126. 134.]
243 cord_individual_obj[indivial_i,:] = [24. 10. 130. 140.]
244
245 min(cord_individual_obj[:,3]) = 48.0
246 historl_G_best_iter[iter,3] = 48.0
247 Begin iteration:

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248
249 iter = 7
250 cord_individual_obj[indivial_i, :] = [ 0. 10. 81. 91.]
251 cord_individual_obj[indivial_i, :] = [ 1. 8. 187. 195.]
252 cord_individual_obj[indivial_i, :] = [ 2. 10. 132. 142.]
253 cord_individual_obj[indivial_i, :] = [ 3. 11. 106. 117.]
254 cord_individual_obj[indivial_i, :] = [ 4. 8. 222. 230.]
255 cord_individual_obj[indivial_i, :] = [ 5. 7. 84. 91.]
256 cord_individual_obj[indivial_i, :] = [ 6. 9. 148. 157.]
257 cord_individual_obj[indivial_i, :] = [ 7. 10. 89. 99.]
258 cord_individual_obj[indivial_i, :] = [ 8. 9. 119. 128.]
259 cord_individual_obj[indivial_i, :] = [ 9. 8. 106. 114.]
260 cord_individual_obj[indivial_i, :] = [ 10. 8. 105. 113.]
261 cord_individual_obj[indivial_i, :] = [ 11. 7. 76. 83.]
262 cord_individual_obj[indivial_i, :] = [ 12. 7. 142. 149.]
263 cord_individual_obj[indivial_i, :] = [ 13. 9. 103. 112.]
264 cord_individual_obj[indivial_i, :] = [ 14. 8. 60. 68.]
265 cord_individual_obj[indivial_i, :] = [ 15. 7. 83. 90.]
266 cord_individual_obj[indivial_i, :] = [ 16. 6. 42. 48.]
267 cord_individual_obj[indivial_i, :] = [ 17. 7. 90. 97.]
268 cord_individual_obj[indivial_i, :] = [ 18. 8. 92. 100.]
269 cord_individual_obj[indivial_i, :] = [ 19. 7. 125. 132.]
270 cord_individual_obj[indivial_i, :] = [ 20. 7. 62. 69.]
271 cord_individual_obj[indivial_i, :] = [ 21. 9. 129. 138.]
272 cord_individual_obj[indivial_i, :] = [ 22. 7. 84. 91.]
273 cord_individual_obj[indivial_i, :] = [ 23. 9. 80. 89.]
274 cord_individual_obj[indivial_i, :] = [ 24. 8. 92. 100.]
275

276 min(cord_individual_obj[:, 3]) = 48.0
277 historl_G_best_iter[iter, 3] = 48.0
278 Begin iteration:
279
280 iter = 8
281 cord_individual_obj[indivial_i, :] = [ 0. 12. 116. 128.]
282 cord_individual_obj[indivial_i, :] = [ 1. 7. 73. 80.]
283 cord_individual_obj[indivial_i, :] = [ 2. 10. 130. 140.]
284 cord_individual_obj[indivial_i, :] = [ 3. 9. 82. 91.]
285 cord_individual_obj[indivial_i, :] = [ 4. 6. 42. 48.]
286 cord_individual_obj[indivial_i, :] = [ 5. 7. 143. 150.]
287 cord_individual_obj[indivial_i, :] = [ 6. 8. 93. 101.]
288 cord_individual_obj[indivial_i, :] = [ 7. 8. 94. 102.]
289 cord_individual_obj[indivial_i, :] = [ 8. 9. 144. 153.]
290 cord_individual_obj[indivial_i, :] = [ 9. 7. 70. 77.]
291 cord_individual_obj[indivial_i, :] = [ 10. 8. 78. 86.]
292 cord_individual_obj[indivial_i, :] = [ 11. 7. 137. 144.]
293 cord_individual_obj[indivial_i, :] = [ 12. 8. 112. 120.]
294 cord_individual_obj[indivial_i, :] = [ 13. 8. 83. 91.]
295 cord_individual_obj[indivial_i, :] = [ 14. 7. 135. 142.]
296 cord_individual_obj[indivial_i, :] = [ 15. 9. 137. 146.]
297 cord_individual_obj[indivial_i, :] = [ 16. 9. 148. 157.]
298 cord_individual_obj[indivial_i, :] = [ 17. 8. 94. 102.]
299 cord_individual_obj[indivial_i, :] = [ 18. 8. 93. 101.]
300 cord_individual_obj[indivial_i, :] = [ 19. 7. 66. 73.]
301 cord_individual_obj[indivial_i, :] = [ 20. 9. 113. 122.]
302 cord_individual_obj[indivial_i, :] = [ 21. 8. 128. 136.]
303 cord_individual_obj[indivial_i, :] = [ 22. 9. 140. 149.]
304 cord_individual_obj[indivial_i, :] = [ 23. 7. 164. 171.]
305 cord_individual_obj[indivial_i, :] = [ 24. 8. 114. 122.]
306

307 min(cord_individual_obj[:, 3]) = 48.0
308 historl_G_best_iter[iter, 3] = 48.0
309 Begin iteration:
310
311 iter = 9
312 cord_individual_obj[indivial_i, :] = [ 0. 12. 120. 132.]
313 cord_individual_obj[indivial_i, :] = [ 1. 8. 74. 82.]
314 cord_individual_obj[indivial_i, :] = [ 2. 9. 124. 133.]
315 cord_individual_obj[indivial_i, :] = [ 3. 11. 82. 93.]
316 cord_individual_obj[indivial_i, :] = [ 4. 8. 161. 169.]
317 cord_individual_obj[indivial_i, :] = [ 5. 8. 117. 125.]
318 cord_individual_obj[indivial_i, :] = [ 6. 9. 148. 157.]
319 cord_individual_obj[indivial_i, :] = [ 7. 10. 84. 94.]
320 cord_individual_obj[indivial_i, :] = [ 8. 10. 143. 153.]
321 cord_individual_obj[indivial_i, :] = [ 9. 8. 75. 83.]
322 cord_individual_obj[indivial_i, :] = [ 10. 10. 163. 173.]
323 cord_individual_obj[indivial_i, :] = [ 11. 7. 76. 83.]
324 cord_individual_obj[indivial_i, :] = [ 12. 9. 233. 242.]
325 cord_individual_obj[indivial_i, :] = [ 13. 8. 81. 89.]
326 cord_individual_obj[indivial_i, :] = [ 14. 8. 108. 116.]
327 cord_individual_obj[indivial_i, :] = [ 15. 9. 137. 146.]
328 cord_individual_obj[indivial_i, :] = [ 16. 10. 92. 102.]
329 cord_individual_obj[indivial_i, :] = [ 17. 7. 181. 188.]
330 cord_individual_obj[indivial_i, :] = [ 18. 8. 94. 102.]
331 cord_individual_obj[indivial_i, :] = [ 19. 9. 92. 101.]

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332 cord_individual_obj[indivial_i, :] = [ 20.  9. 105. 114.]
333 cord_individual_obj[indivial_i, :] = [ 21.  7. 137. 144.]
334 cord_individual_obj[indivial_i, :] = [22.  7. 79. 86.]
335 cord_individual_obj[indivial_i, :] = [23.  6. 42. 48.]
336 cord_individual_obj[indivial_i, :] = [ 24.  8. 92. 100.]
337
338 min(cord_individual_obj[:, 3]) = 48.0
339 histol_G_best_iter[iter, 3] = 48.0
340 Begin iteration:
341
342 iter = 10
343 cord_individual_obj[indivial_i, :] = [ 0.  9. 110. 119.]
344 cord_individual_obj[indivial_i, :] = [ 1.  8. 194. 202.]
345 cord_individual_obj[indivial_i, :] = [ 2. 11. 102. 113.]
346 cord_individual_obj[indivial_i, :] = [ 3. 10. 116. 126.]
347 cord_individual_obj[indivial_i, :] = [ 4.  9. 128. 137.]
348 cord_individual_obj[indivial_i, :] = [ 5.  8. 89. 97.]
349 cord_individual_obj[indivial_i, :] = [ 6.  8. 161. 169.]
350 cord_individual_obj[indivial_i, :] = [ 7.  7. 62. 69.]
351 cord_individual_obj[indivial_i, :] = [ 8.  7. 127. 134.]
352 cord_individual_obj[indivial_i, :] = [ 9.  7. 119. 126.]
353 cord_individual_obj[indivial_i, :] = [10.  8. 73. 81.]
354 cord_individual_obj[indivial_i, :] = [11.  9. 135. 144.]
355 cord_individual_obj[indivial_i, :] = [12.  6. 42. 48.]
356 cord_individual_obj[indivial_i, :] = [13.  7. 78. 85.]
357 cord_individual_obj[indivial_i, :] = [14.  9. 93. 102.]
358 cord_individual_obj[indivial_i, :] = [15.  8. 107. 115.]
359 cord_individual_obj[indivial_i, :] = [16.  9. 102. 111.]
360 cord_individual_obj[indivial_i, :] = [17.  6. 86. 92.]
361 cord_individual_obj[indivial_i, :] = [18.  9. 86. 95.]
362 cord_individual_obj[indivial_i, :] = [19.  6. 94. 100.]
363 cord_individual_obj[indivial_i, :] = [20.  7. 75. 82.]
364 cord_individual_obj[indivial_i, :] = [21.  7. 75. 82.]
365 cord_individual_obj[indivial_i, :] = [22.  8. 139. 147.]
366 cord_individual_obj[indivial_i, :] = [23.  9. 72. 81.]
367 cord_individual_obj[indivial_i, :] = [24.  8. 102. 110.]
368
369 min(cord_individual_obj[:, 3]) = 48.0
370 histol_G_best_iter[iter, 3] = 48.0
371 Begin iteration:
372
373 iter = 11
374 cord_individual_obj[indivial_i, :] = [ 0.  8. 120. 128.]
375 cord_individual_obj[indivial_i, :] = [ 1.  6. 42. 48.]
376 cord_individual_obj[indivial_i, :] = [ 2.  8. 117. 125.]
377 cord_individual_obj[indivial_i, :] = [ 3.  9. 133. 142.]
378 cord_individual_obj[indivial_i, :] = [ 4.  7. 127. 134.]
379 cord_individual_obj[indivial_i, :] = [ 5.  9. 96. 105.]
380 cord_individual_obj[indivial_i, :] = [ 6.  7. 106. 113.]
381 cord_individual_obj[indivial_i, :] = [ 7.  9. 68. 77.]
382 cord_individual_obj[indivial_i, :] = [ 8.  9. 128. 137.]
383 cord_individual_obj[indivial_i, :] = [ 9.  8. 89. 97.]
384 cord_individual_obj[indivial_i, :] = [10.  8. 50. 58.]
385 cord_individual_obj[indivial_i, :] = [11.  9. 145. 154.]
386 cord_individual_obj[indivial_i, :] = [12.  9. 182. 191.]
387 cord_individual_obj[indivial_i, :] = [13.  7. 106. 113.]
388 cord_individual_obj[indivial_i, :] = [14.  7. 60. 67.]
389 cord_individual_obj[indivial_i, :] = [15.  7. 93. 100.]
390 cord_individual_obj[indivial_i, :] = [16.  8. 74. 82.]
391 cord_individual_obj[indivial_i, :] = [17.  6. 109. 115.]
392 cord_individual_obj[indivial_i, :] = [18.  7. 51. 58.]
393 cord_individual_obj[indivial_i, :] = [19.  7. 87. 94.]
394 cord_individual_obj[indivial_i, :] = [20.  8. 145. 153.]
395 cord_individual_obj[indivial_i, :] = [21.  7. 81. 88.]
396 cord_individual_obj[indivial_i, :] = [22.  9. 60. 69.]
397 cord_individual_obj[indivial_i, :] = [23.  6. 73. 79.]
398 cord_individual_obj[indivial_i, :] = [24.  8. 84. 92.]
399
400 min(cord_individual_obj[:, 3]) = 48.0
401 histol_G_best_iter[iter, 3] = 48.0
402 Begin iteration:
403
404 iter = 12
405 cord_individual_obj[indivial_i, :] = [ 0.  9. 99. 108.]
406 cord_individual_obj[indivial_i, :] = [ 1.  7. 112. 119.]
407 cord_individual_obj[indivial_i, :] = [ 2. 10. 78. 88.]
408 cord_individual_obj[indivial_i, :] = [ 3.  9. 90. 99.]
409 cord_individual_obj[indivial_i, :] = [ 4.  8. 222. 230.]
410 cord_individual_obj[indivial_i, :] = [ 5.  6. 70. 76.]
411 cord_individual_obj[indivial_i, :] = [ 6. 12. 168. 180.]
412 cord_individual_obj[indivial_i, :] = [ 7.  9. 102. 111.]
413 cord_individual_obj[indivial_i, :] = [ 8. 11. 141. 152.]
414 cord_individual_obj[indivial_i, :] = [ 9.  9. 120. 129.]
415 cord_individual_obj[indivial_i, :] = [10.  8. 58. 66.]

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416 cord_individual_obj[indivial_i,:] = [11. 7. 77. 84.]
417 cord_individual_obj[indivial_i,:] = [12. 6. 42. 48.]
418 cord_individual_obj[indivial_i,:] = [13. 9. 171. 180.]
419 cord_individual_obj[indivial_i,:] = [14. 9. 153. 162.]
420 cord_individual_obj[indivial_i,:] = [15. 8. 83. 91.]
421 cord_individual_obj[indivial_i,:] = [16. 9. 151. 160.]
422 cord_individual_obj[indivial_i,:] = [17. 7. 204. 211.]
423 cord_individual_obj[indivial_i,:] = [18. 8. 111. 119.]
424 cord_individual_obj[indivial_i,:] = [19. 7. 79. 86.]
425 cord_individual_obj[indivial_i,:] = [20. 9. 128. 137.]
426 cord_individual_obj[indivial_i,:] = [21. 8. 87. 95.]
427 cord_individual_obj[indivial_i,:] = [22. 7. 113. 120.]
428 cord_individual_obj[indivial_i,:] = [23. 9. 102. 111.]
429 cord_individual_obj[indivial_i,:] = [24. 9. 136. 145.]
430
431 min(cord_individual_obj[:,3]) = 48.0
432 histol_G_best_iter[iter,3] = 48.0
433 Begin iteration:
434
435 iter = 13
436 cord_individual_obj[indivial_i,:] = [0. 9. 76. 85.]
437 cord_individual_obj[indivial_i,:] = [1. 8. 154. 162.]
438 cord_individual_obj[indivial_i,:] = [2. 9. 99. 108.]
439 cord_individual_obj[indivial_i,:] = [3. 9. 97. 106.]
440 cord_individual_obj[indivial_i,:] = [4. 6. 42. 48.]
441 cord_individual_obj[indivial_i,:] = [5. 8. 113. 121.]
442 cord_individual_obj[indivial_i,:] = [6. 9. 92. 101.]
443 cord_individual_obj[indivial_i,:] = [7. 7. 75. 82.]
444 cord_individual_obj[indivial_i,:] = [8. 7. 167. 174.]
445 cord_individual_obj[indivial_i,:] = [9. 6. 82. 88.]
446 cord_individual_obj[indivial_i,:] = [10. 7. 90. 97.]
447 cord_individual_obj[indivial_i,:] = [11. 8. 165. 173.]
448 cord_individual_obj[indivial_i,:] = [12. 8. 144. 152.]
449 cord_individual_obj[indivial_i,:] = [13. 9. 136. 145.]
450 cord_individual_obj[indivial_i,:] = [14. 8. 82. 90.]
451 cord_individual_obj[indivial_i,:] = [15. 8. 110. 118.]
452 cord_individual_obj[indivial_i,:] = [16. 7. 96. 103.]
453 cord_individual_obj[indivial_i,:] = [17. 7. 111. 118.]
454 cord_individual_obj[indivial_i,:] = [18. 10. 70. 80.]
455 cord_individual_obj[indivial_i,:] = [19. 7. 61. 68.]
456 cord_individual_obj[indivial_i,:] = [20. 8. 80. 88.]
457 cord_individual_obj[indivial_i,:] = [21. 7. 130. 137.]
458 cord_individual_obj[indivial_i,:] = [22. 7. 82. 89.]
459 cord_individual_obj[indivial_i,:] = [23. 7. 113. 120.]
460 cord_individual_obj[indivial_i,:] = [24. 10. 131. 141.]
461
462 min(cord_individual_obj[:,3]) = 48.0
463 histol_G_best_iter[iter,3] = 48.0
464 Begin iteration:
465
466 iter = 14
467 cord_individual_obj[indivial_i,:] = [0. 9. 79. 88.]
468 cord_individual_obj[indivial_i,:] = [1. 8. 90. 98.]
469 cord_individual_obj[indivial_i,:] = [2. 10. 144. 154.]
470 cord_individual_obj[indivial_i,:] = [3. 8. 79. 87.]
471 cord_individual_obj[indivial_i,:] = [4. 8. 193. 201.]
472 cord_individual_obj[indivial_i,:] = [5. 11. 88. 99.]
473 cord_individual_obj[indivial_i,:] = [6. 9. 95. 104.]
474 cord_individual_obj[indivial_i,:] = [7. 9. 81. 90.]
475 cord_individual_obj[indivial_i,:] = [8. 6. 42. 48.]
476 cord_individual_obj[indivial_i,:] = [9. 7. 61. 68.]
477 cord_individual_obj[indivial_i,:] = [10. 7. 107. 114.]
478 cord_individual_obj[indivial_i,:] = [11. 10. 106. 116.]
479 cord_individual_obj[indivial_i,:] = [12. 7. 75. 82.]
480 cord_individual_obj[indivial_i,:] = [13. 6. 58. 64.]
481 cord_individual_obj[indivial_i,:] = [14. 8. 124. 132.]
482 cord_individual_obj[indivial_i,:] = [15. 8. 92. 100.]
483 cord_individual_obj[indivial_i,:] = [16. 7. 135. 142.]
484 cord_individual_obj[indivial_i,:] = [17. 7. 111. 118.]
485 cord_individual_obj[indivial_i,:] = [18. 7. 88. 95.]
486 cord_individual_obj[indivial_i,:] = [19. 8. 112. 120.]
487 cord_individual_obj[indivial_i,:] = [20. 7. 71. 78.]
488 cord_individual_obj[indivial_i,:] = [21. 6. 85. 91.]
489 cord_individual_obj[indivial_i,:] = [22. 9. 87. 96.]
490 cord_individual_obj[indivial_i,:] = [23. 9. 138. 147.]
491 cord_individual_obj[indivial_i,:] = [24. 6. 83. 89.]
492
493 min(cord_individual_obj[:,3]) = 48.0
494 histol_G_best_iter[iter,3] = 48.0
495 Begin iteration:
496
497 iter = 15
498 cord_individual_obj[indivial_i,:] = [0. 8. 97. 105.]
499 cord_individual_obj[indivial_i,:] = [1. 9. 98. 107.]

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500 cord_individual_obj[indivial_i,:] = [ 2. 7. 62. 69.]
501 cord_individual_obj[indivial_i,:] = [ 3. 9. 102. 111.]
502 cord_individual_obj[indivial_i,:] = [ 4. 6. 42. 48.]
503 cord_individual_obj[indivial_i,:] = [ 5. 9. 120. 129.]
504 cord_individual_obj[indivial_i,:] = [ 6. 9. 146. 155.]
505 cord_individual_obj[indivial_i,:] = [ 7. 8. 60. 68.]
506 cord_individual_obj[indivial_i,:] = [ 8. 9. 160. 169.]
507 cord_individual_obj[indivial_i,:] = [ 9. 8. 60. 68.]
508 cord_individual_obj[indivial_i,:] = [10. 7. 75. 82.]
509 cord_individual_obj[indivial_i,:] = [11. 9. 162. 171.]
510 cord_individual_obj[indivial_i,:] = [12. 7. 86. 93.]
511 cord_individual_obj[indivial_i,:] = [13. 7. 103. 110.]
512 cord_individual_obj[indivial_i,:] = [14. 9. 127. 136.]
513 cord_individual_obj[indivial_i,:] = [15. 7. 100. 107.]
514 cord_individual_obj[indivial_i,:] = [16. 7. 130. 137.]
515 cord_individual_obj[indivial_i,:] = [17. 6. 163. 169.]
516 cord_individual_obj[indivial_i,:] = [18. 7. 65. 72.]
517 cord_individual_obj[indivial_i,:] = [19. 7. 136. 143.]
518 cord_individual_obj[indivial_i,:] = [20. 8. 63. 71.]
519 cord_individual_obj[indivial_i,:] = [21. 6. 80. 86.]
520 cord_individual_obj[indivial_i,:] = [22. 8. 105. 113.]
521 cord_individual_obj[indivial_i,:] = [23. 8. 64. 72.]
522 cord_individual_obj[indivial_i,:] = [24. 8. 124. 132.]
523
524 min(cord_individual_obj[:, 3]) = 48.0
525 histol_G_best_iter[iter, 3] = 48.0
526 Begin iteration:
527
528 iter = 16
529 cord_individual_obj[indivial_i,:] = [ 0. 11. 110. 121.]
530 cord_individual_obj[indivial_i,:] = [ 1. 6. 146. 152.]
531 cord_individual_obj[indivial_i,:] = [ 2. 7. 66. 73.]
532 cord_individual_obj[indivial_i,:] = [ 3. 8. 77. 85.]
533 cord_individual_obj[indivial_i,:] = [ 4. 10. 161. 171.]
534 cord_individual_obj[indivial_i,:] = [ 5. 7. 197. 204.]
535 cord_individual_obj[indivial_i,:] = [ 6. 7. 112. 119.]
536 cord_individual_obj[indivial_i,:] = [ 7. 8. 135. 143.]
537 cord_individual_obj[indivial_i,:] = [ 8. 8. 83. 91.]
538 cord_individual_obj[indivial_i,:] = [ 9. 7. 153. 160.]
539 cord_individual_obj[indivial_i,:] = [10. 7. 81. 88.]
540 cord_individual_obj[indivial_i,:] = [11. 6. 42. 48.]
541 cord_individual_obj[indivial_i,:] = [12. 8. 101. 109.]
542 cord_individual_obj[indivial_i,:] = [13. 8. 156. 164.]
543 cord_individual_obj[indivial_i,:] = [14. 6. 101. 107.]
544 cord_individual_obj[indivial_i,:] = [15. 8. 99. 107.]
545 cord_individual_obj[indivial_i,:] = [16. 8. 108. 116.]
546 cord_individual_obj[indivial_i,:] = [17. 7. 81. 88.]
547 cord_individual_obj[indivial_i,:] = [18. 10. 67. 77.]
548 cord_individual_obj[indivial_i,:] = [19. 7. 82. 89.]
549 cord_individual_obj[indivial_i,:] = [20. 8. 59. 67.]
550 cord_individual_obj[indivial_i,:] = [21. 7. 197. 204.]
551 cord_individual_obj[indivial_i,:] = [22. 7. 97. 104.]
552 cord_individual_obj[indivial_i,:] = [23. 7. 110. 117.]
553 cord_individual_obj[indivial_i,:] = [24. 9. 115. 124.]
554
555 min(cord_individual_obj[:, 3]) = 48.0
556 histol_G_best_iter[iter, 3] = 48.0
557 Begin iteration:
558
559 iter = 17
560 cord_individual_obj[indivial_i,:] = [ 0. 7. 82. 89.]
561 cord_individual_obj[indivial_i,:] = [ 1. 8. 101. 109.]
562 cord_individual_obj[indivial_i,:] = [ 2. 10. 62. 72.]
563 cord_individual_obj[indivial_i,:] = [ 3. 8. 67. 75.]
564 cord_individual_obj[indivial_i,:] = [ 4. 7. 161. 168.]
565 cord_individual_obj[indivial_i,:] = [ 5. 6. 42. 48.]
566 cord_individual_obj[indivial_i,:] = [ 6. 7. 138. 145.]
567 cord_individual_obj[indivial_i,:] = [ 7. 9. 88. 97.]
568 cord_individual_obj[indivial_i,:] = [ 8. 6. 147. 153.]
569 cord_individual_obj[indivial_i,:] = [ 9. 7. 71. 78.]
570 cord_individual_obj[indivial_i,:] = [10. 8. 72. 80.]
571 cord_individual_obj[indivial_i,:] = [11. 7. 76. 83.]
572 cord_individual_obj[indivial_i,:] = [12. 8. 179. 187.]
573 cord_individual_obj[indivial_i,:] = [13. 8. 134. 142.]
574 cord_individual_obj[indivial_i,:] = [14. 7. 95. 102.]
575 cord_individual_obj[indivial_i,:] = [15. 8. 92. 100.]
576 cord_individual_obj[indivial_i,:] = [16. 10. 60. 70.]
577 cord_individual_obj[indivial_i,:] = [17. 7. 151. 158.]
578 cord_individual_obj[indivial_i,:] = [18. 7. 95. 102.]
579 cord_individual_obj[indivial_i,:] = [19. 8. 93. 101.]
580 cord_individual_obj[indivial_i,:] = [20. 8. 69. 77.]
581 cord_individual_obj[indivial_i,:] = [21. 8. 110. 118.]
582 cord_individual_obj[indivial_i,:] = [22. 8. 107. 115.]
583 cord_individual_obj[indivial_i,:] = [23. 8. 84. 92.]

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unknown

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584     cord_individual_obj[indivial_i, :] = [ 24.  9. 108. 117.]
585
586     min(cord_individual_obj[:, 3]) = 48.0
587     historl_G_best_iter[iter, 3] = 48.0
588 Begin iteration:
589 iter = 18
590     cord_individual_obj[indivial_i, :] = [ 0. 11. 134. 145.]
591     cord_individual_obj[indivial_i, :] = [ 1. 7. 64. 71.]
592     cord_individual_obj[indivial_i, :] = [ 2. 9. 154. 163.]
593     cord_individual_obj[indivial_i, :] = [ 3. 11. 84. 95.]
594     cord_individual_obj[indivial_i, :] = [ 4. 8. 112. 120.]
595     cord_individual_obj[indivial_i, :] = [ 5. 9. 98. 107.]
596     cord_individual_obj[indivial_i, :] = [ 6. 8. 82. 90.]
597     cord_individual_obj[indivial_i, :] = [ 7. 10. 61. 71.]
598     cord_individual_obj[indivial_i, :] = [ 8. 10. 100. 110.]
599     cord_individual_obj[indivial_i, :] = [ 9. 9. 63. 72.]
600     cord_individual_obj[indivial_i, :] = [ 10. 7. 113. 120.]
601     cord_individual_obj[indivial_i, :] = [ 11. 10. 127. 137.]
602     cord_individual_obj[indivial_i, :] = [ 12. 6. 42. 48.]
603     cord_individual_obj[indivial_i, :] = [ 13. 8. 77. 85.]
604     cord_individual_obj[indivial_i, :] = [ 14. 7. 96. 103.]
605     cord_individual_obj[indivial_i, :] = [ 15. 7. 100. 107.]
606     cord_individual_obj[indivial_i, :] = [ 16. 8. 121. 129.]
607     cord_individual_obj[indivial_i, :] = [ 17. 7. 116. 123.]
608     cord_individual_obj[indivial_i, :] = [ 18. 8. 119. 127.]
609     cord_individual_obj[indivial_i, :] = [ 19. 9. 130. 139.]
610     cord_individual_obj[indivial_i, :] = [ 20. 6. 139. 145.]
611     cord_individual_obj[indivial_i, :] = [ 21. 8. 57. 65.]
612     cord_individual_obj[indivial_i, :] = [ 22. 8. 144. 152.]
613     cord_individual_obj[indivial_i, :] = [ 23. 9. 128. 137.]
614     cord_individual_obj[indivial_i, :] = [ 24. 11. 95. 106.]
615
616
617     min(cord_individual_obj[:, 3]) = 48.0
618     historl_G_best_iter[iter, 3] = 48.0
619 Begin iteration:
620
621 iter = 19
622     cord_individual_obj[indivial_i, :] = [ 0. 8. 140. 148.]
623     cord_individual_obj[indivial_i, :] = [ 1. 9. 55. 64.]
624     cord_individual_obj[indivial_i, :] = [ 2. 6. 42. 48.]
625     cord_individual_obj[indivial_i, :] = [ 3. 9. 80. 89.]
626     cord_individual_obj[indivial_i, :] = [ 4. 8. 91. 99.]
627     cord_individual_obj[indivial_i, :] = [ 5. 8. 70. 78.]
628     cord_individual_obj[indivial_i, :] = [ 6. 9. 114. 123.]
629     cord_individual_obj[indivial_i, :] = [ 7. 10. 80. 90.]
630     cord_individual_obj[indivial_i, :] = [ 8. 8. 152. 160.]
631     cord_individual_obj[indivial_i, :] = [ 9. 7. 68. 75.]
632     cord_individual_obj[indivial_i, :] = [ 10. 8. 60. 68.]
633     cord_individual_obj[indivial_i, :] = [ 11. 8. 156. 164.]
634     cord_individual_obj[indivial_i, :] = [ 12. 8. 144. 152.]
635     cord_individual_obj[indivial_i, :] = [ 13. 8. 86. 94.]
636     cord_individual_obj[indivial_i, :] = [ 14. 8. 152. 160.]
637     cord_individual_obj[indivial_i, :] = [ 15. 9. 82. 91.]
638     cord_individual_obj[indivial_i, :] = [ 16. 8. 108. 116.]
639     cord_individual_obj[indivial_i, :] = [ 17. 7. 229. 236.]
640     cord_individual_obj[indivial_i, :] = [ 18. 8. 159. 167.]
641     cord_individual_obj[indivial_i, :] = [ 19. 9. 53. 62.]
642     cord_individual_obj[indivial_i, :] = [ 20. 7. 80. 87.]
643     cord_individual_obj[indivial_i, :] = [ 21. 7. 124. 131.]
644     cord_individual_obj[indivial_i, :] = [ 22. 8. 62. 70.]
645     cord_individual_obj[indivial_i, :] = [ 23. 7. 88. 95.]
646     cord_individual_obj[indivial_i, :] = [ 24. 10. 70. 80.]
647
648     min(cord_individual_obj[:, 3]) = 48.0
649     historl_G_best_iter[iter, 3] = 48.0
650 Begin iteration:
651
652 iter = 20
653     cord_individual_obj[indivial_i, :] = [ 0. 9. 88. 97.]
654     cord_individual_obj[indivial_i, :] = [ 1. 8. 124. 132.]
655     cord_individual_obj[indivial_i, :] = [ 2. 10. 134. 144.]
656     cord_individual_obj[indivial_i, :] = [ 3. 8. 94. 102.]
657     cord_individual_obj[indivial_i, :] = [ 4. 8. 75. 83.]
658     cord_individual_obj[indivial_i, :] = [ 5. 10. 66. 76.]
659     cord_individual_obj[indivial_i, :] = [ 6. 7. 87. 94.]
660     cord_individual_obj[indivial_i, :] = [ 7. 11. 79. 90.]
661     cord_individual_obj[indivial_i, :] = [ 8. 9. 91. 100.]
662     cord_individual_obj[indivial_i, :] = [ 9. 9. 83. 92.]
663     cord_individual_obj[indivial_i, :] = [ 10. 8. 73. 81.]
664     cord_individual_obj[indivial_i, :] = [ 11. 10. 177. 187.]
665     cord_individual_obj[indivial_i, :] = [ 12. 7. 78. 85.]
666     cord_individual_obj[indivial_i, :] = [ 13. 11. 86. 97.]
667     cord_individual_obj[indivial_i, :] = [ 14. 8. 111. 119.]
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668 cord_individual_obj[indivial_i,:] = [15. 7. 86. 93.]
669 cord_individual_obj[indivial_i,:] = [16. 8. 64. 72.]
670 cord_individual_obj[indivial_i,:] = [17. 6. 42. 48.]
671 cord_individual_obj[indivial_i,:] = [18. 8. 136. 144.]
672 cord_individual_obj[indivial_i,:] = [19. 9. 77. 86.]
673 cord_individual_obj[indivial_i,:] = [20. 7. 147. 154.]
674 cord_individual_obj[indivial_i,:] = [21. 7. 158. 165.]
675 cord_individual_obj[indivial_i,:] = [22. 8. 82. 90.]
676 cord_individual_obj[indivial_i,:] = [23. 8. 82. 90.]
677 cord_individual_obj[indivial_i,:] = [24. 8. 67. 75.]
678
679 min(cord_individual_obj[:, 3]) = 48.0
680 historl_G_best_iter[iter, 3] = 48.0
681 Iteration calculate over
682
683
684
685
686 All item are in Bin and:
687 Bin area = 1080
688 Real_area = 208.0
689 Proportion_of_area = 0.1925925925925926
690 BEST_CHROM =
691 berth: [24. 16. 4. 2.5 7. 12. 11.5 2. 24. 11. 9. 3. 17.5]
692 time: [0. 2. 4. 0. 0. 5. 2. 4. 4. 2. 3. 0.]
693 num_QC: [2. 4. 4. 4. 3. 4. 3. 4. 3. 5. 3. 4.]
694 Objective function values and some other indicators:
695 Obj0 = 6.00 Obj1 = 42.00 Obj0 + Obj1 = 48.00
696 Total movement of crane: 8.00
697 Total waiting time in berth position: 26.00
698 Total index of q during berthing: 808.00
699 Specific arrangement for each vessel:
700 V_id: 0 li: 8.0 xi: 24.0 bow of i: 20.0 tail of i: 28.0 gama_i0: 0.0 gama_i1: 3
701 .0 gama_i1 + 1: 4.0 gama_i1 - gama_i0: 3.0 duration_time_i: 4.0 demand_i: 160.0 work
702 load_i: 160.0 work load gap_i: 0
703 V_id: 1 li: 8.0 xi: 16.0 bow of i: 12.0 tail of i: 20.0 gama_i0: 2.0 gama_i1: 3
704 .0 gama_i1 + 1: 4.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 140.0 work
705 load_i: 140.0 work load gap_i: 0
706 V_id: 2 li: 8.0 xi: 4.0 bow of i: 0.0 tail of i: 8.0 gama_i0: 4.0 gama_i1: 5.0
707 .0 gama_i1 + 1: 6.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work load_i:
708 120.0 work load gap_i: 0
709 V_id: 3 li: 5.0 xi: 2.5 bow of i: 0.0 tail of i: 5.0 gama_i0: 0.0 gama_i1: 1.0
710 .0 gama_i1 + 1: 2.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 140.0 work load_i:
711 140.0 work load gap_i: 0
712 V_id: 4 li: 4.0 xi: 7.0 bow of i: 5.0 tail of i: 9.0 gama_i0: 0.0 gama_i1: 1.0
713 .0 gama_i1 + 1: 2.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 80.0 work load_i:
714 80.0 work load gap_i: 0
715 V_id: 5 li: 6.0 xi: 12.0 bow of i: 9.0 tail of i: 15.0 gama_i0: 0.0 gama_i1: 1
716 .0 gama_i1 + 1: 2.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 160.0 work
717 load_i: 160.0 work load gap_i: 0
718 V_id: 6 li: 7.0 xi: 11.5 bow of i: 8.0 tail of i: 15.0 gama_i0: 5.0 gama_i1: 6
719 .0 gama_i1 + 1: 7.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 120.0 work
720 load_i: 120.0 work load gap_i: 0
721 V_id: 7 li: 4.0 xi: 2.0 bow of i: 0.0 tail of i: 4.0 gama_i0: 2.0 gama_i1: 2
722 .0 gama_i1 + 1: 3.0 gama_i1 - gama_i0: 0.0 duration_time_i: 1.0 demand_i: 80.0 work load_i:
723 80.0 work load gap_i: 0
724 V_id: 8 li: 8.0 xi: 24.0 bow of i: 20.0 tail of i: 28.0 gama_i0: 4.0 gama_i1: 5
725 .0 gama_i1 + 1: 6.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 140.0 work
726 load_i: 140.0 work load gap_i: 0
727 V_id: 9 li: 6.0 xi: 11.0 bow of i: 8.0 tail of i: 14.0 gama_i0: 4.0 gama_i1: 4
728 .0 gama_i1 + 1: 5.0 gama_i1 - gama_i0: 0.0 duration_time_i: 1.0 demand_i: 60.0 work
729 load_i: 60.0 work load gap_i: 0
730 V_id: 10 li: 6.0 xi: 9.0 bow of i: 6.0 tail of i: 12.0 gama_i0: 2.0 gama_i1: 3
731 .0 gama_i1 + 1: 4.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 160.0 work
732 load_i: 160.0 work load gap_i: 0
733 V_id: 11 li: 6.0 xi: 3.0 bow of i: 0.0 tail of i: 6.0 gama_i0: 3.0 gama_i1: 3
734 .0 gama_i1 + 1: 4.0 gama_i1 - gama_i0: 0.0 duration_time_i: 1.0 demand_i: 60.0 work load_i:
735 60.0 work load gap_i: 0
736 V_id: 12 li: 5.0 xi: 17.5 bow of i: 15.0 tail of i: 20.0 gama_i0: 0.0 gama_i1: 1
737 : 1.0 gama_i1 + 1: 2.0 gama_i1 - gama_i0: 1.0 duration_time_i: 2.0 demand_i: 160.0 work
738 load_i: 160.0 work load gap_i: 0
739
740 Algorithm finished and the total CPU time: 347 s
741 End
742

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