

unknown

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80  cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
81  cord_individual_obj[indivial_i,:] = [ 6. 6. 38. 44.]
82  cord_individual_obj[indivial_i,:] = [ 7. 6. 38. 44.]
83  cord_individual_obj[indivial_i,:] = [ 8. 6. 8. 14.]
84  cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
85  cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
86  cord_individual_obj[indivial_i,:] = [11. 6. 38. 44.]
87  cord_individual_obj[indivial_i,:] = [12. 6. 24. 30.]
88  cord_individual_obj[indivial_i,:] = [13. 6. 38. 44.]
89  cord_individual_obj[indivial_i,:] = [14. 6. 38. 44.]
90
91 min(cord_individual_obj[:,3]) = 14.0
92 historl_G_best_iter[iter,3] = 14.0
93 Begin iteration:
94
95 iter = 3
96  cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
97  cord_individual_obj[indivial_i,:] = [ 1. 4. 72. 76.]
98  cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
99  cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
100 cord_individual_obj[indivial_i,:] = [ 4. 6. 24. 30.]
101 cord_individual_obj[indivial_i,:] = [ 5. 6. 62. 68.]
102 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
103 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
104 cord_individual_obj[indivial_i,:] = [ 8. 6. 44. 50.]
105 cord_individual_obj[indivial_i,:] = [ 9. 6. 38. 44.]
106 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
107 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
108 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
109 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
110 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
111
112 min(cord_individual_obj[:,3]) = 14.0
113 historl_G_best_iter[iter,3] = 14.0
114 Begin iteration:
115
116 iter = 4
117  cord_individual_obj[indivial_i,:] = [ 0. 6. 8. 14.]
118  cord_individual_obj[indivial_i,:] = [ 1. 6. 8. 14.]
119  cord_individual_obj[indivial_i,:] = [ 2. 6. 34. 40.]
120  cord_individual_obj[indivial_i,:] = [ 3. 6. 62. 68.]
121  cord_individual_obj[indivial_i,:] = [ 4. 6. 16. 22.]
122  cord_individual_obj[indivial_i,:] = [ 5. 6. 56. 62.]
123  cord_individual_obj[indivial_i,:] = [ 6. 6. 8. 14.]
124  cord_individual_obj[indivial_i,:] = [ 7. 6. 22. 28.]
125  cord_individual_obj[indivial_i,:] = [ 8. 6. 42. 48.]
126  cord_individual_obj[indivial_i,:] = [ 9. 6. 34. 40.]
127  cord_individual_obj[indivial_i,:] = [10. 6. 44. 50.]
128  cord_individual_obj[indivial_i,:] = [11. 6. 8. 14.]
129  cord_individual_obj[indivial_i,:] = [12. 6. 34. 40.]
130  cord_individual_obj[indivial_i,:] = [13. 6. 16. 22.]
131  cord_individual_obj[indivial_i,:] = [14. 6. 14. 20.]
132
133 min(cord_individual_obj[:,3]) = 14.0
134 historl_G_best_iter[iter,3] = 14.0
135 Begin iteration:
136
137 iter = 5
138  cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
139  cord_individual_obj[indivial_i,:] = [ 1. 5. 58. 63.]
140  cord_individual_obj[indivial_i,:] = [ 2. 6. 38. 44.]
141  cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
142  cord_individual_obj[indivial_i,:] = [ 4. 6. 46. 52.]
143  cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
144  cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
145  cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
146  cord_individual_obj[indivial_i,:] = [ 8. 6. 38. 44.]
147  cord_individual_obj[indivial_i,:] = [ 9. 6. 42. 48.]
148  cord_individual_obj[indivial_i,:] = [10. 6. 42. 48.]
149  cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
150  cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
151  cord_individual_obj[indivial_i,:] = [13. 6. 38. 44.]
152  cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
153
154 min(cord_individual_obj[:,3]) = 14.0
155 historl_G_best_iter[iter,3] = 14.0
156 Begin iteration:
157
158 iter = 6
159  cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
160  cord_individual_obj[indivial_i,:] = [ 1. 6. 38. 44.]
161  cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
162  cord_individual_obj[indivial_i,:] = [ 3. 5. 42. 47.]
163  cord_individual_obj[indivial_i,:] = [ 4. 6. 38. 44.]

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164 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
165 cord_individual_obj[indivial_i,:] = [ 6. 6. 38. 44.]
166 cord_individual_obj[indivial_i,:] = [ 7. 6. 8. 14.]
167 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
168 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
169 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
170 cord_individual_obj[indivial_i,:] = [11. 6. 38. 44.]
171 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
172 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
173 cord_individual_obj[indivial_i,:] = [14. 6. 38. 44.]
174
175 min(cord_individual_obj[:,3]) = 14.0
176 historl_G_best_iter[iter,3] = 14.0
177 Begin iteration:
178
179 iter = 7
180 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
181 cord_individual_obj[indivial_i,:] = [ 1. 5. 42. 47.]
182 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
183 cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
184 cord_individual_obj[indivial_i,:] = [ 4. 6. 60. 66.]
185 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
186 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
187 cord_individual_obj[indivial_i,:] = [ 7. 6. 38. 44.]
188 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
189 cord_individual_obj[indivial_i,:] = [ 9. 6. 44. 50.]
190 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
191 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
192 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
193 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
194 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
195
196 min(cord_individual_obj[:,3]) = 14.0
197 historl_G_best_iter[iter,3] = 14.0
198 Begin iteration:
199
200 iter = 8
201 cord_individual_obj[indivial_i,:] = [ 0. 6. 8. 14.]
202 cord_individual_obj[indivial_i,:] = [ 1. 5. 36. 41.]
203 cord_individual_obj[indivial_i,:] = [ 2. 6. 34. 40.]
204 cord_individual_obj[indivial_i,:] = [ 3. 5. 42. 47.]
205 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]
206 cord_individual_obj[indivial_i,:] = [ 5. 6. 8. 14.]
207 cord_individual_obj[indivial_i,:] = [ 6. 6. 8. 14.]
208 cord_individual_obj[indivial_i,:] = [ 7. 6. 8. 14.]
209 cord_individual_obj[indivial_i,:] = [ 8. 6. 14. 20.]
210 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
211 cord_individual_obj[indivial_i,:] = [10. 6. 16. 22.]
212 cord_individual_obj[indivial_i,:] = [11. 6. 60. 66.]
213 cord_individual_obj[indivial_i,:] = [12. 6. 34. 40.]
214 cord_individual_obj[indivial_i,:] = [13. 6. 16. 22.]
215 cord_individual_obj[indivial_i,:] = [14. 6. 14. 20.]
216
217 min(cord_individual_obj[:,3]) = 14.0
218 historl_G_best_iter[iter,3] = 14.0
219 Begin iteration:
220
221 iter = 9
222 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
223 cord_individual_obj[indivial_i,:] = [ 1. 4. 38. 42.]
224 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
225 cord_individual_obj[indivial_i,:] = [ 3. 6. 62. 68.]
226 cord_individual_obj[indivial_i,:] = [ 4. 6. 68. 74.]
227 cord_individual_obj[indivial_i,:] = [ 5. 6. 50. 56.]
228 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
229 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
230 cord_individual_obj[indivial_i,:] = [ 8. 6. 62. 68.]
231 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
232 cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
233 cord_individual_obj[indivial_i,:] = [11. 6. 8. 14.]
234 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
235 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
236 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
237
238 min(cord_individual_obj[:,3]) = 14.0
239 historl_G_best_iter[iter,3] = 14.0
240 Begin iteration:
241
242 iter = 10
243 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
244 cord_individual_obj[indivial_i,:] = [ 1. 4. 58. 62.]
245 cord_individual_obj[indivial_i,:] = [ 2. 6. 62. 68.]
246 cord_individual_obj[indivial_i,:] = [ 3. 4. 74. 78.]
247 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]

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248 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
249 cord_individual_obj[indivial_i,:] = [ 6. 6. 38. 44.]
250 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
251 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
252 cord_individual_obj[indivial_i,:] = [ 9. 6. 38. 44.]
253 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
254 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
255 cord_individual_obj[indivial_i,:] = [12. 6. 42. 48.]
256 cord_individual_obj[indivial_i,:] = [13. 6. 38. 44.]
257 cord_individual_obj[indivial_i,:] = [14. 6. 38. 44.]
258
259 min(cord_individual_obj[:,3]) = 14.0
260 historl_G_best_iter[iter,3] = 14.0
261 Begin iteration:
262
263 iter = 11
264 cord_individual_obj[indivial_i,:] = [ 0. 6. 42. 48.]
265 cord_individual_obj[indivial_i,:] = [ 1. 6. 38. 44.]
266 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
267 cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
268 cord_individual_obj[indivial_i,:] = [ 4. 6. 62. 68.]
269 cord_individual_obj[indivial_i,:] = [ 5. 6. 42. 48.]
270 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
271 cord_individual_obj[indivial_i,:] = [ 7. 6. 38. 44.]
272 cord_individual_obj[indivial_i,:] = [ 8. 6. 44. 50.]
273 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
274 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
275 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
276 cord_individual_obj[indivial_i,:] = [12. 6. 50. 56.]
277 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
278 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
279
280 min(cord_individual_obj[:,3]) = 14.0
281 historl_G_best_iter[iter,3] = 14.0
282 Begin iteration:
283
284 iter = 12
285 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
286 cord_individual_obj[indivial_i,:] = [ 1. 5. 38. 43.]
287 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
288 cord_individual_obj[indivial_i,:] = [ 3. 4. 98. 102.]
289 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]
290 cord_individual_obj[indivial_i,:] = [ 5. 6. 50. 56.]
291 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
292 cord_individual_obj[indivial_i,:] = [ 7. 6. 38. 44.]
293 cord_individual_obj[indivial_i,:] = [ 8. 6. 34. 40.]
294 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
295 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
296 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
297 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
298 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
299 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
300
301 min(cord_individual_obj[:,3]) = 14.0
302 historl_G_best_iter[iter,3] = 14.0
303 Begin iteration:
304
305 iter = 13
306 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
307 cord_individual_obj[indivial_i,:] = [ 1. 6. 24. 30.]
308 cord_individual_obj[indivial_i,:] = [ 2. 6. 24. 30.]
309 cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
310 cord_individual_obj[indivial_i,:] = [ 4. 6. 80. 86.]
311 cord_individual_obj[indivial_i,:] = [ 5. 6. 42. 48.]
312 cord_individual_obj[indivial_i,:] = [ 6. 6. 12. 18.]
313 cord_individual_obj[indivial_i,:] = [ 7. 6. 12. 18.]
314 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
315 cord_individual_obj[indivial_i,:] = [ 9. 6. 24. 30.]
316 cord_individual_obj[indivial_i,:] = [10. 6. 24. 30.]
317 cord_individual_obj[indivial_i,:] = [11. 6. 24. 30.]
318 cord_individual_obj[indivial_i,:] = [12. 6. 24. 30.]
319 cord_individual_obj[indivial_i,:] = [13. 6. 16. 22.]
320 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
321
322 min(cord_individual_obj[:,3]) = 14.0
323 historl_G_best_iter[iter,3] = 14.0
324 Begin iteration:
325
326 iter = 14
327 cord_individual_obj[indivial_i,:] = [ 0. 6. 42. 48.]
328 cord_individual_obj[indivial_i,:] = [ 1. 4. 46. 50.]
329 cord_individual_obj[indivial_i,:] = [ 2. 6. 38. 44.]
330 cord_individual_obj[indivial_i,:] = [ 3. 6. 62. 68.]
331 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]

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332 cord_individual_obj[indivial_i,:] = [ 5. 6. 24. 30.]
333 cord_individual_obj[indivial_i,:] = [ 6. 6. 42. 48.]
334 cord_individual_obj[indivial_i,:] = [ 7. 6. 24. 30.]
335 cord_individual_obj[indivial_i,:] = [ 8. 6. 24. 30.]
336 cord_individual_obj[indivial_i,:] = [ 9. 6. 38. 44.]
337 cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
338 cord_individual_obj[indivial_i,:] = [11. 6. 38. 44.]
339 cord_individual_obj[indivial_i,:] = [12. 6. 24. 30.]
340 cord_individual_obj[indivial_i,:] = [13. 6. 38. 44.]
341 cord_individual_obj[indivial_i,:] = [14. 6. 38. 44.]
342
343 min(cord_individual_obj[:,3]) = 14.0
344 historl_G_best_iter[iter,3] = 14.0
345 Begin iteration:
346
347 iter = 15
348 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
349 cord_individual_obj[indivial_i,:] = [ 1. 6. 38. 44.]
350 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
351 cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
352 cord_individual_obj[indivial_i,:] = [ 4. 6. 68. 74.]
353 cord_individual_obj[indivial_i,:] = [ 5. 6. 62. 68.]
354 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
355 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
356 cord_individual_obj[indivial_i,:] = [ 8. 6. 44. 50.]
357 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
358 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
359 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
360 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
361 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
362 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
363
364 min(cord_individual_obj[:,3]) = 14.0
365 historl_G_best_iter[iter,3] = 14.0
366 Begin iteration:
367
368 iter = 16
369 cord_individual_obj[indivial_i,:] = [ 0. 6. 8. 14.]
370 cord_individual_obj[indivial_i,:] = [ 1. 4. 58. 62.]
371 cord_individual_obj[indivial_i,:] = [ 2. 6. 14. 20.]
372 cord_individual_obj[indivial_i,:] = [ 3. 5. 42. 47.]
373 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]
374 cord_individual_obj[indivial_i,:] = [ 5. 6. 56. 62.]
375 cord_individual_obj[indivial_i,:] = [ 6. 6. 8. 14.]
376 cord_individual_obj[indivial_i,:] = [ 7. 6. 14. 20.]
377 cord_individual_obj[indivial_i,:] = [ 8. 6. 42. 48.]
378 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
379 cord_individual_obj[indivial_i,:] = [10. 6. 8. 14.]
380 cord_individual_obj[indivial_i,:] = [11. 6. 8. 14.]
381 cord_individual_obj[indivial_i,:] = [12. 6. 60. 66.]
382 cord_individual_obj[indivial_i,:] = [13. 6. 36. 42.]
383 cord_individual_obj[indivial_i,:] = [14. 6. 8. 14.]
384
385 min(cord_individual_obj[:,3]) = 14.0
386 historl_G_best_iter[iter,3] = 14.0
387 Begin iteration:
388
389 iter = 17
390 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
391 cord_individual_obj[indivial_i,:] = [ 1. 6. 38. 44.]
392 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
393 cord_individual_obj[indivial_i,:] = [ 3. 6. 50. 56.]
394 cord_individual_obj[indivial_i,:] = [ 4. 6. 80. 86.]
395 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
396 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
397 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
398 cord_individual_obj[indivial_i,:] = [ 8. 6. 32. 38.]
399 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
400 cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
401 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
402 cord_individual_obj[indivial_i,:] = [12. 6. 8. 14.]
403 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
404 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
405
406 min(cord_individual_obj[:,3]) = 14.0
407 historl_G_best_iter[iter,3] = 14.0
408 Begin iteration:
409
410 iter = 18
411 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
412 cord_individual_obj[indivial_i,:] = [ 1. 4. 38. 42.]
413 cord_individual_obj[indivial_i,:] = [ 2. 6. 44. 50.]
414 cord_individual_obj[indivial_i,:] = [ 3. 5. 42. 47.]
415 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]

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416 cord_individual_obj[indivial_i,:] = [ 5. 6. 42. 48.]
417 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
418 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
419 cord_individual_obj[indivial_i,:] = [ 8. 6. 50. 56.]
420 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
421 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
422 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
423 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
424 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
425 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
426
427 min(cord_individual_obj[:,3]) = 14.0
428 historl_G_best_iter[iter,3] = 14.0
429 Begin iteration:
430
431 iter = 19
432 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
433 cord_individual_obj[indivial_i,:] = [ 1. 6. 38. 44.]
434 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
435 cord_individual_obj[indivial_i,:] = [ 3. 4. 50. 54.]
436 cord_individual_obj[indivial_i,:] = [ 4. 6. 92. 98.]
437 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
438 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
439 cord_individual_obj[indivial_i,:] = [ 7. 6. 8. 14.]
440 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
441 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
442 cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
443 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
444 cord_individual_obj[indivial_i,:] = [12. 6. 42. 48.]
445 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
446 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
447
448 min(cord_individual_obj[:,3]) = 14.0
449 historl_G_best_iter[iter,3] = 14.0
450 Begin iteration:
451
452 iter = 20
453 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
454 cord_individual_obj[indivial_i,:] = [ 1. 6. 38. 44.]
455 cord_individual_obj[indivial_i,:] = [ 2. 6. 38. 44.]
456 cord_individual_obj[indivial_i,:] = [ 3. 4. 58. 62.]
457 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]
458 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
459 cord_individual_obj[indivial_i,:] = [ 6. 6. 38. 44.]
460 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
461 cord_individual_obj[indivial_i,:] = [ 8. 6. 62. 68.]
462 cord_individual_obj[indivial_i,:] = [ 9. 6. 38. 44.]
463 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
464 cord_individual_obj[indivial_i,:] = [11. 6. 38. 44.]
465 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
466 cord_individual_obj[indivial_i,:] = [13. 6. 38. 44.]
467 cord_individual_obj[indivial_i,:] = [14. 6. 38. 44.]
468
469 min(cord_individual_obj[:,3]) = 14.0
470 historl_G_best_iter[iter,3] = 14.0
471 Begin iteration:
472
473 iter = 21
474 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
475 cord_individual_obj[indivial_i,:] = [ 1. 5. 38. 43.]
476 cord_individual_obj[indivial_i,:] = [ 2. 6. 24. 30.]
477 cord_individual_obj[indivial_i,:] = [ 3. 5. 34. 39.]
478 cord_individual_obj[indivial_i,:] = [ 4. 6. 62. 68.]
479 cord_individual_obj[indivial_i,:] = [ 5. 6. 32. 38.]
480 cord_individual_obj[indivial_i,:] = [ 6. 6. 12. 18.]
481 cord_individual_obj[indivial_i,:] = [ 7. 6. 12. 18.]
482 cord_individual_obj[indivial_i,:] = [ 8. 6. 8. 14.]
483 cord_individual_obj[indivial_i,:] = [ 9. 6. 24. 30.]
484 cord_individual_obj[indivial_i,:] = [10. 6. 24. 30.]
485 cord_individual_obj[indivial_i,:] = [11. 6. 32. 38.]
486 cord_individual_obj[indivial_i,:] = [12. 6. 24. 30.]
487 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
488 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
489
490 min(cord_individual_obj[:,3]) = 14.0
491 historl_G_best_iter[iter,3] = 14.0
492 Begin iteration:
493
494 iter = 22
495 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
496 cord_individual_obj[indivial_i,:] = [ 1. 4. 64. 68.]
497 cord_individual_obj[indivial_i,:] = [ 2. 6. 38. 44.]
498 cord_individual_obj[indivial_i,:] = [ 3. 4. 38. 42.]
499 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]

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500 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
501 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
502 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
503 cord_individual_obj[indivial_i,:] = [ 8. 6. 44. 50.]
504 cord_individual_obj[indivial_i,:] = [ 9. 6. 38. 44.]
505 cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
506 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
507 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
508 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
509 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
510
511 min(cord_individual_obj[:,3]) = 14.0
512 historl_G_best_iter[iter,3] = 14.0
513 Begin iteration:
514
515 iter = 23
516 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
517 cord_individual_obj[indivial_i,:] = [ 1. 6. 8. 14.]
518 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
519 cord_individual_obj[indivial_i,:] = [ 3. 5. 66. 71.]
520 cord_individual_obj[indivial_i,:] = [ 4. 6. 50. 56.]
521 cord_individual_obj[indivial_i,:] = [ 5. 6. 62. 68.]
522 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
523 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
524 cord_individual_obj[indivial_i,:] = [ 8. 6. 38. 44.]
525 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
526 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
527 cord_individual_obj[indivial_i,:] = [11. 6. 38. 44.]
528 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
529 cord_individual_obj[indivial_i,:] = [13. 6. 42. 48.]
530 cord_individual_obj[indivial_i,:] = [14. 6. 38. 44.]
531
532 min(cord_individual_obj[:,3]) = 14.0
533 historl_G_best_iter[iter,3] = 14.0
534 Begin iteration:
535
536 iter = 24
537 cord_individual_obj[indivial_i,:] = [ 0. 6. 8. 14.]
538 cord_individual_obj[indivial_i,:] = [ 1. 4. 98. 102.]
539 cord_individual_obj[indivial_i,:] = [ 2. 6. 34. 40.]
540 cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
541 cord_individual_obj[indivial_i,:] = [ 4. 6. 36. 42.]
542 cord_individual_obj[indivial_i,:] = [ 5. 6. 50. 56.]
543 cord_individual_obj[indivial_i,:] = [ 6. 6. 8. 14.]
544 cord_individual_obj[indivial_i,:] = [ 7. 6. 14. 20.]
545 cord_individual_obj[indivial_i,:] = [ 8. 6. 14. 20.]
546 cord_individual_obj[indivial_i,:] = [ 9. 6. 22. 28.]
547 cord_individual_obj[indivial_i,:] = [10. 6. 8. 14.]
548 cord_individual_obj[indivial_i,:] = [11. 6. 8. 14.]
549 cord_individual_obj[indivial_i,:] = [12. 6. 16. 22.]
550 cord_individual_obj[indivial_i,:] = [13. 6. 16. 22.]
551 cord_individual_obj[indivial_i,:] = [14. 6. 8. 14.]
552
553 min(cord_individual_obj[:,3]) = 14.0
554 historl_G_best_iter[iter,3] = 14.0
555 Begin iteration:
556
557 iter = 25
558 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
559 cord_individual_obj[indivial_i,:] = [ 1. 6. 8. 14.]
560 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
561 cord_individual_obj[indivial_i,:] = [ 3. 5. 42. 47.]
562 cord_individual_obj[indivial_i,:] = [ 4. 6. 80. 86.]
563 cord_individual_obj[indivial_i,:] = [ 5. 6. 50. 56.]
564 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
565 cord_individual_obj[indivial_i,:] = [ 7. 6. 38. 44.]
566 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
567 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
568 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
569 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
570 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
571 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
572 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
573
574 min(cord_individual_obj[:,3]) = 14.0
575 historl_G_best_iter[iter,3] = 14.0
576 Begin iteration:
577
578 iter = 26
579 cord_individual_obj[indivial_i,:] = [ 0. 6. 8. 14.]
580 cord_individual_obj[indivial_i,:] = [ 1. 4. 64. 68.]
581 cord_individual_obj[indivial_i,:] = [ 2. 6. 14. 20.]
582 cord_individual_obj[indivial_i,:] = [ 3. 4. 70. 74.]
583 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]

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584     cord_individual_obj[indivial_i, :] = [ 5. 6. 36. 42.]
585     cord_individual_obj[indivial_i, :] = [ 6. 6. 8. 14.]
586     cord_individual_obj[indivial_i, :] = [ 7. 6. 14. 20.]
587     cord_individual_obj[indivial_i, :] = [ 8. 6. 44. 50.]
588     cord_individual_obj[indivial_i, :] = [ 9. 6. 8. 14.]
589     cord_individual_obj[indivial_i, :] = [10. 6. 8. 14.]
590     cord_individual_obj[indivial_i, :] = [11. 6. 8. 14.]
591     cord_individual_obj[indivial_i, :] = [12. 6. 14. 20.]
592     cord_individual_obj[indivial_i, :] = [13. 6. 60. 66.]
593     cord_individual_obj[indivial_i, :] = [14. 6. 14. 20.]
594
595 min(cord_individual_obj[:, 3]) = 14.0
596 historl_G_best_iter[iter, 3] = 14.0
597 Begin iteration:
598
599 iter = 27
600     cord_individual_obj[indivial_i, :] = [ 0. 6. 38. 44.]
601     cord_individual_obj[indivial_i, :] = [ 1. 4. 32. 36.]
602     cord_individual_obj[indivial_i, :] = [ 2. 6. 28. 34.]
603     cord_individual_obj[indivial_i, :] = [ 3. 6. 8. 14.]
604     cord_individual_obj[indivial_i, :] = [ 4. 6. 68. 74.]
605     cord_individual_obj[indivial_i, :] = [ 5. 6. 50. 56.]
606     cord_individual_obj[indivial_i, :] = [ 6. 6. 28. 34.]
607     cord_individual_obj[indivial_i, :] = [ 7. 6. 38. 44.]
608     cord_individual_obj[indivial_i, :] = [ 8. 6. 28. 34.]
609     cord_individual_obj[indivial_i, :] = [ 9. 6. 28. 34.]
610     cord_individual_obj[indivial_i, :] = [10. 6. 28. 34.]
611     cord_individual_obj[indivial_i, :] = [11. 6. 28. 34.]
612     cord_individual_obj[indivial_i, :] = [12. 6. 38. 44.]
613     cord_individual_obj[indivial_i, :] = [13. 6. 28. 34.]
614     cord_individual_obj[indivial_i, :] = [14. 6. 28. 34.]
615
616 min(cord_individual_obj[:, 3]) = 14.0
617 historl_G_best_iter[iter, 3] = 14.0
618 Begin iteration:
619
620 iter = 28
621     cord_individual_obj[indivial_i, :] = [ 0. 6. 8. 14.]
622     cord_individual_obj[indivial_i, :] = [ 1. 6. 14. 20.]
623     cord_individual_obj[indivial_i, :] = [ 2. 6. 14. 20.]
624     cord_individual_obj[indivial_i, :] = [ 3. 6. 50. 56.]
625     cord_individual_obj[indivial_i, :] = [ 4. 6. 8. 14.]
626     cord_individual_obj[indivial_i, :] = [ 5. 6. 32. 38.]
627     cord_individual_obj[indivial_i, :] = [ 6. 6. 8. 14.]
628     cord_individual_obj[indivial_i, :] = [ 7. 6. 20. 26.]
629     cord_individual_obj[indivial_i, :] = [ 8. 6. 48. 54.]
630     cord_individual_obj[indivial_i, :] = [ 9. 6. 14. 20.]
631     cord_individual_obj[indivial_i, :] = [10. 6. 8. 14.]
632     cord_individual_obj[indivial_i, :] = [11. 6. 8. 14.]
633     cord_individual_obj[indivial_i, :] = [12. 6. 14. 20.]
634     cord_individual_obj[indivial_i, :] = [13. 6. 16. 22.]
635     cord_individual_obj[indivial_i, :] = [14. 6. 14. 20.]
636
637 min(cord_individual_obj[:, 3]) = 14.0
638 historl_G_best_iter[iter, 3] = 14.0
639 Begin iteration:
640
641 iter = 29
642     cord_individual_obj[indivial_i, :] = [ 0. 6. 38. 44.]
643     cord_individual_obj[indivial_i, :] = [ 1. 6. 38. 44.]
644     cord_individual_obj[indivial_i, :] = [ 2. 6. 28. 34.]
645     cord_individual_obj[indivial_i, :] = [ 3. 6. 8. 14.]
646     cord_individual_obj[indivial_i, :] = [ 4. 6. 42. 48.]
647     cord_individual_obj[indivial_i, :] = [ 5. 6. 62. 68.]
648     cord_individual_obj[indivial_i, :] = [ 6. 6. 28. 34.]
649     cord_individual_obj[indivial_i, :] = [ 7. 6. 38. 44.]
650     cord_individual_obj[indivial_i, :] = [ 8. 6. 62. 68.]
651     cord_individual_obj[indivial_i, :] = [ 9. 6. 28. 34.]
652     cord_individual_obj[indivial_i, :] = [10. 6. 38. 44.]
653     cord_individual_obj[indivial_i, :] = [11. 6. 28. 34.]
654     cord_individual_obj[indivial_i, :] = [12. 6. 38. 44.]
655     cord_individual_obj[indivial_i, :] = [13. 6. 28. 34.]
656     cord_individual_obj[indivial_i, :] = [14. 6. 28. 34.]
657
658 min(cord_individual_obj[:, 3]) = 14.0
659 historl_G_best_iter[iter, 3] = 14.0
660 Begin iteration:
661
662 iter = 30
663     cord_individual_obj[indivial_i, :] = [ 0. 6. 8. 14.]
664     cord_individual_obj[indivial_i, :] = [ 1. 4. 140. 144.]
665     cord_individual_obj[indivial_i, :] = [ 2. 6. 8. 14.]
666     cord_individual_obj[indivial_i, :] = [ 3. 5. 42. 47.]
667     cord_individual_obj[indivial_i, :] = [ 4. 6. 80. 86.]

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668 cord_individual_obj[indivial_i,:] = [ 5. 6. 8. 14.]
669 cord_individual_obj[indivial_i,:] = [ 6. 6. 8. 14.]
670 cord_individual_obj[indivial_i,:] = [ 7. 6. 8. 14.]
671 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
672 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
673 cord_individual_obj[indivial_i,:] = [10. 6. 8. 14.]
674 cord_individual_obj[indivial_i,:] = [11. 6. 8. 14.]
675 cord_individual_obj[indivial_i,:] = [12. 6. 8. 14.]
676 cord_individual_obj[indivial_i,:] = [13. 6. 36. 42.]
677 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
678
679 min(cord_individual_obj[:,3]) = 14.0
680 historl_G_best_iter[iter,3] = 14.0
681 Begin iteration:
682
683 iter = 31
684 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
685 cord_individual_obj[indivial_i,:] = [ 1. 6. 8. 14.]
686 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
687 cord_individual_obj[indivial_i,:] = [ 3. 6. 70. 76.]
688 cord_individual_obj[indivial_i,:] = [ 4. 6. 50. 56.]
689 cord_individual_obj[indivial_i,:] = [ 5. 6. 50. 56.]
690 cord_individual_obj[indivial_i,:] = [ 6. 6. 38. 44.]
691 cord_individual_obj[indivial_i,:] = [ 7. 6. 38. 44.]
692 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
693 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
694 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
695 cord_individual_obj[indivial_i,:] = [11. 6. 38. 44.]
696 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
697 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
698 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
699
700 min(cord_individual_obj[:,3]) = 14.0
701 historl_G_best_iter[iter,3] = 14.0
702 Begin iteration:
703
704 iter = 32
705 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
706 cord_individual_obj[indivial_i,:] = [ 1. 6. 38. 44.]
707 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
708 cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
709 cord_individual_obj[indivial_i,:] = [ 4. 6. 68. 74.]
710 cord_individual_obj[indivial_i,:] = [ 5. 6. 50. 56.]
711 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
712 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
713 cord_individual_obj[indivial_i,:] = [ 8. 6. 50. 56.]
714 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
715 cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
716 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
717 cord_individual_obj[indivial_i,:] = [12. 6. 42. 48.]
718 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
719 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
720
721 min(cord_individual_obj[:,3]) = 14.0
722 historl_G_best_iter[iter,3] = 14.0
723 Begin iteration:
724
725 iter = 33
726 cord_individual_obj[indivial_i,:] = [ 0. 6. 8. 14.]
727 cord_individual_obj[indivial_i,:] = [ 1. 4. 34. 38.]
728 cord_individual_obj[indivial_i,:] = [ 2. 6. 44. 50.]
729 cord_individual_obj[indivial_i,:] = [ 3. 5. 54. 59.]
730 cord_individual_obj[indivial_i,:] = [ 4. 6. 8. 14.]
731 cord_individual_obj[indivial_i,:] = [ 5. 6. 36. 42.]
732 cord_individual_obj[indivial_i,:] = [ 6. 6. 8. 14.]
733 cord_individual_obj[indivial_i,:] = [ 7. 6. 8. 14.]
734 cord_individual_obj[indivial_i,:] = [ 8. 6. 16. 22.]
735 cord_individual_obj[indivial_i,:] = [ 9. 6. 14. 20.]
736 cord_individual_obj[indivial_i,:] = [10. 6. 8. 14.]
737 cord_individual_obj[indivial_i,:] = [11. 6. 8. 14.]
738 cord_individual_obj[indivial_i,:] = [12. 6. 32. 38.]
739 cord_individual_obj[indivial_i,:] = [13. 6. 36. 42.]
740 cord_individual_obj[indivial_i,:] = [14. 6. 8. 14.]
741
742 min(cord_individual_obj[:,3]) = 14.0
743 historl_G_best_iter[iter,3] = 14.0
744 Begin iteration:
745
746 iter = 34
747 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
748 cord_individual_obj[indivial_i,:] = [ 1. 6. 38. 44.]
749 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
750 cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
751 cord_individual_obj[indivial_i,:] = [ 4. 6. 80. 86.]

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752     cord_individual_obj[indivial_i, :] = [ 5. 6. 42. 48.]
753     cord_individual_obj[indivial_i, :] = [ 6. 6. 28. 34.]
754     cord_individual_obj[indivial_i, :] = [ 7. 6. 60. 66.]
755     cord_individual_obj[indivial_i, :] = [ 8. 6. 34. 40.]
756     cord_individual_obj[indivial_i, :] = [ 9. 6. 38. 44.]
757     cord_individual_obj[indivial_i, :] = [10. 6. 28. 34.]
758     cord_individual_obj[indivial_i, :] = [11. 6. 28. 34.]
759     cord_individual_obj[indivial_i, :] = [12. 6. 78. 84.]
760     cord_individual_obj[indivial_i, :] = [13. 6. 28. 34.]
761     cord_individual_obj[indivial_i, :] = [14. 6. 28. 34.]
762
763 min(cord_individual_obj[:, 3]) = 14.0
764 historl_G_best_iter[iter, 3] = 14.0
765 Begin iteration:
766
767 iter = 35
768     cord_individual_obj[indivial_i, :] = [ 0. 6. 8. 14.]
769     cord_individual_obj[indivial_i, :] = [ 1. 6. 14. 20.]
770     cord_individual_obj[indivial_i, :] = [ 2. 6. 44. 50.]
771     cord_individual_obj[indivial_i, :] = [ 3. 6. 62. 68.]
772     cord_individual_obj[indivial_i, :] = [ 4. 6. 8. 14.]
773     cord_individual_obj[indivial_i, :] = [ 5. 6. 36. 42.]
774     cord_individual_obj[indivial_i, :] = [ 6. 6. 8. 14.]
775     cord_individual_obj[indivial_i, :] = [ 7. 6. 8. 14.]
776     cord_individual_obj[indivial_i, :] = [ 8. 6. 28. 34.]
777     cord_individual_obj[indivial_i, :] = [ 9. 6. 20. 26.]
778     cord_individual_obj[indivial_i, :] = [10. 6. 8. 14.]
779     cord_individual_obj[indivial_i, :] = [11. 6. 24. 30.]
780     cord_individual_obj[indivial_i, :] = [12. 6. 56. 62.]
781     cord_individual_obj[indivial_i, :] = [13. 6. 36. 42.]
782     cord_individual_obj[indivial_i, :] = [14. 6. 12. 18.]
783
784 min(cord_individual_obj[:, 3]) = 14.0
785 historl_G_best_iter[iter, 3] = 14.0
786 Begin iteration:
787
788 iter = 36
789     cord_individual_obj[indivial_i, :] = [ 0. 6. 38. 44.]
790     cord_individual_obj[indivial_i, :] = [ 1. 4. 38. 42.]
791     cord_individual_obj[indivial_i, :] = [ 2. 6. 38. 44.]
792     cord_individual_obj[indivial_i, :] = [ 3. 6. 8. 14.]
793     cord_individual_obj[indivial_i, :] = [ 4. 6. 80. 86.]
794     cord_individual_obj[indivial_i, :] = [ 5. 6. 38. 44.]
795     cord_individual_obj[indivial_i, :] = [ 6. 6. 28. 34.]
796     cord_individual_obj[indivial_i, :] = [ 7. 6. 38. 44.]
797     cord_individual_obj[indivial_i, :] = [ 8. 6. 24. 30.]
798     cord_individual_obj[indivial_i, :] = [ 9. 6. 38. 44.]
799     cord_individual_obj[indivial_i, :] = [10. 6. 38. 44.]
800     cord_individual_obj[indivial_i, :] = [11. 6. 38. 44.]
801     cord_individual_obj[indivial_i, :] = [12. 6. 38. 44.]
802     cord_individual_obj[indivial_i, :] = [13. 6. 28. 34.]
803     cord_individual_obj[indivial_i, :] = [14. 6. 42. 48.]
804
805 min(cord_individual_obj[:, 3]) = 14.0
806 historl_G_best_iter[iter, 3] = 14.0
807 Begin iteration:
808
809 iter = 37
810     cord_individual_obj[indivial_i, :] = [ 0. 6. 38. 44.]
811     cord_individual_obj[indivial_i, :] = [ 1. 6. 38. 44.]
812     cord_individual_obj[indivial_i, :] = [ 2. 6. 28. 34.]
813     cord_individual_obj[indivial_i, :] = [ 3. 4. 74. 78.]
814     cord_individual_obj[indivial_i, :] = [ 4. 6. 8. 14.]
815     cord_individual_obj[indivial_i, :] = [ 5. 6. 62. 68.]
816     cord_individual_obj[indivial_i, :] = [ 6. 6. 28. 34.]
817     cord_individual_obj[indivial_i, :] = [ 7. 6. 38. 44.]
818     cord_individual_obj[indivial_i, :] = [ 8. 6. 28. 34.]
819     cord_individual_obj[indivial_i, :] = [ 9. 6. 28. 34.]
820     cord_individual_obj[indivial_i, :] = [10. 6. 28. 34.]
821     cord_individual_obj[indivial_i, :] = [11. 6. 28. 34.]
822     cord_individual_obj[indivial_i, :] = [12. 6. 38. 44.]
823     cord_individual_obj[indivial_i, :] = [13. 6. 28. 34.]
824     cord_individual_obj[indivial_i, :] = [14. 6. 28. 34.]
825
826 min(cord_individual_obj[:, 3]) = 14.0
827 historl_G_best_iter[iter, 3] = 14.0
828 Begin iteration:
829
830 iter = 38
831     cord_individual_obj[indivial_i, :] = [ 0. 6. 38. 44.]
832     cord_individual_obj[indivial_i, :] = [ 1. 4. 76. 80.]
833     cord_individual_obj[indivial_i, :] = [ 2. 6. 62. 68.]
834     cord_individual_obj[indivial_i, :] = [ 3. 6. 8. 14.]
835     cord_individual_obj[indivial_i, :] = [ 4. 6. 42. 48.]

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unknown

```
836 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
837 cord_individual_obj[indivial_i,:] = [ 6. 6. 38. 44.]
838 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
839 cord_individual_obj[indivial_i,:] = [ 8. 6. 38. 44.]
840 cord_individual_obj[indivial_i,:] = [ 9. 6. 38. 44.]
841 cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
842 cord_individual_obj[indivial_i,:] = [11. 6. 38. 44.]
843 cord_individual_obj[indivial_i,:] = [12. 6. 42. 48.]
844 cord_individual_obj[indivial_i,:] = [13. 6. 38. 44.]
845 cord_individual_obj[indivial_i,:] = [14. 6. 38. 44.]
846
847 min(cord_individual_obj[:,3]) = 14.0
848 historl_G_best_iter[iter,3] = 14.0
849 Begin iteration:
850
851 iter = 39
852 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
853 cord_individual_obj[indivial_i,:] = [ 1. 6. 8. 14.]
854 cord_individual_obj[indivial_i,:] = [ 2. 6. 28. 34.]
855 cord_individual_obj[indivial_i,:] = [ 3. 4. 70. 74.]
856 cord_individual_obj[indivial_i,:] = [ 4. 6. 60. 66.]
857 cord_individual_obj[indivial_i,:] = [ 5. 6. 38. 44.]
858 cord_individual_obj[indivial_i,:] = [ 6. 6. 28. 34.]
859 cord_individual_obj[indivial_i,:] = [ 7. 6. 38. 44.]
860 cord_individual_obj[indivial_i,:] = [ 8. 6. 28. 34.]
861 cord_individual_obj[indivial_i,:] = [ 9. 6. 28. 34.]
862 cord_individual_obj[indivial_i,:] = [10. 6. 28. 34.]
863 cord_individual_obj[indivial_i,:] = [11. 6. 28. 34.]
864 cord_individual_obj[indivial_i,:] = [12. 6. 38. 44.]
865 cord_individual_obj[indivial_i,:] = [13. 6. 28. 34.]
866 cord_individual_obj[indivial_i,:] = [14. 6. 28. 34.]
867
868 min(cord_individual_obj[:,3]) = 14.0
869 historl_G_best_iter[iter,3] = 14.0
870 Begin iteration:
871
872 iter = 40
873 cord_individual_obj[indivial_i,:] = [ 0. 6. 38. 44.]
874 cord_individual_obj[indivial_i,:] = [ 1. 5. 46. 51.]
875 cord_individual_obj[indivial_i,:] = [ 2. 6. 62. 68.]
876 cord_individual_obj[indivial_i,:] = [ 3. 6. 8. 14.]
877 cord_individual_obj[indivial_i,:] = [ 4. 6. 80. 86.]
878 cord_individual_obj[indivial_i,:] = [ 5. 6. 62. 68.]
879 cord_individual_obj[indivial_i,:] = [ 6. 6. 38. 44.]
880 cord_individual_obj[indivial_i,:] = [ 7. 6. 60. 66.]
881 cord_individual_obj[indivial_i,:] = [ 8. 6. 50. 56.]
882 cord_individual_obj[indivial_i,:] = [ 9. 6. 38. 44.]
883 cord_individual_obj[indivial_i,:] = [10. 6. 38. 44.]
884 cord_individual_obj[indivial_i,:] = [11. 6. 38. 44.]
885 cord_individual_obj[indivial_i,:] = [12. 6. 42. 48.]
886 cord_individual_obj[indivial_i,:] = [13. 6. 38. 44.]
887 cord_individual_obj[indivial_i,:] = [14. 6. 38. 44.]
888
889 min(cord_individual_obj[:,3]) = 14.0
890 historl_G_best_iter[iter,3] = 14.0
891 Iteration calculate over
892
893
894
895
896 All item are in Bin and:
897 Bin area = 1080
898 Real_area = 113.0
899 Proportion_of_area = 0.10462962962962963
900 BEST_CHROM =
901 berth: [ 2.5 8. 26. 13.5 17.5 21. ]
902 time: [0. 0. 0. 0. 0. 0.]
903 num_QC: [2. 5. 2. 3. 2. 2.]
904 Objective function values and some other indicators:
905 Obj0 = 6.00      Obj1 = 8.00      Obj0 + Obj1 = 14.00
906 Total movement of crane: 8.00
907 Total waiting time in berth position: 0.00
908 Total index of q during berthing: 748.00
909 Specific arrangement for each vessel:
910 V_id: 0          li: 5.0           xi: 2.5           bow of i: 0.0           tail of i: 5.0           gama_i0: 0.0           gama_i1: 1.0
911          gama_i1 + 1: 2.0        gama_i1 - gama_i0: 1.0        duration_time_i: 2.0        demand_i: 80.0        work load_i:
912          work load gap_i: 0
911 V_id: 1          li: 6.0           xi: 8.0           bow of i: 5.0           tail of i: 11.0          gama_i0: 0.0           gama_i1: 1.0
912          gama_i1 + 1: 2.0        gama_i1 - gama_i0: 1.0        duration_time_i: 2.0        demand_i: 120.0        work load_i:
913          work load gap_i: 0
912 V_id: 2          li: 6.0           xi: 26.0          bow of i: 23.0          tail of i: 29.0          gama_i0: 0.0           gama_i1: 6
913          gama_i1 + 1: 7.0        gama_i1 - gama_i0: 6.0        duration_time_i: 7.0        demand_i: 260.0        work
913          work load gap_i: 0
913 V_id: 3          li: 5.0           xi: 13.5          bow of i: 11.0          tail of i: 16.0          gama_i0: 0.0           gama_i1: 1
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unknown

913 .0	gama_i1 + 1: 2.0	gama_i1 - gama_i0: 1.0	duration_time_i: 2.0	demand_i: 80.0	work
load_i: 80.0	work load gap_i: 0				
914 .0	V_id: 4	li: 3.0	xi: 17.5	bow of i: 16.0	tail of i: 19.0
load_i: 200.0	gama_i1 + 1: 5.0	gama_i1 - gama_i0: 4.0	duration_time_i: 5.0	gama_i0: 0.0	gama_i1: 4
915 .0	V_id: 5	li: 4.0	xi: 21.0	bow of i: 19.0	tail of i: 23.0
load_i: 220.0	gama_i1 + 1: 6.0	gama_i1 - gama_i0: 5.0	duration_time_i: 6.0	gama_i0: 0.0	gama_i1: 5
916	work load gap_i: 0				
917	Algorithm finished and the total CPU time: 202 s				
918	End				
919					