

```
1 C:\Users\wilko\AppData\Local\Programs\Python\Python38
  \python.exe "C:/Users/wilko/OneDrive/Documents/DIS
  Code/Neat AI.py"
2 pygame 2.0.1 (SDL 2.0.14, Python 3.8.7)
3 Hello from the pygame community. https://www.pygame.
  org/contribute.html
4 Ai: 0 Gen: 1
5 Sim Starting
6 Sim over Total pop = 0 Tick Complete = 70
7 Fitness = 759.0
8 Ai: 1 Gen: 1
9 Sim Starting
10 Sim over Total pop = 0 Tick Complete = 310
11 Fitness = 562.999999999856
12 Ai: 2 Gen: 1
13 Sim Starting
14 Sim over Total pop = 0 Tick Complete = 80
15 Fitness = 754.689999999985
16 Ai: 3 Gen: 1
17 Sim Starting
18 Sim over Total pop = 0 Tick Complete = 168
19 Fitness = 773.140000000003
20 Ai: 4 Gen: 1
21 Sim Starting
22 Sim over Total pop = 0 Tick Complete = 1004
23 Fitness = 1931.799999999618
24 Ai: 5 Gen: 1
25 Sim Starting
26 Sim over Total pop = 0 Tick Complete = 68
27 Fitness = 207.1799999999623
28 Ai: 6 Gen: 1
29 Sim Starting
30 Sim over Total pop = 0 Tick Complete = 77
31 Fitness = 462.299999999895
32 Ai: 7 Gen: 1
33 Sim Starting
34 Sim over Total pop = 0 Tick Complete = 75
35 Fitness = 371.759999999879
36 Ai: 8 Gen: 1
37 Sim Starting
38 Sim over Total pop = 0 Tick Complete = 78
39 Fitness = 430.6199999998784
40 Ai: 9 Gen: 1
41 Sim Starting
```

```
42 Sim over Total pop = 0 Tick Complete = 812
43 Fitness = 2402.0099999999125
44 Ai: 10 Gen: 1
45 Sim Starting
46 Sim over Total pop = 0 Tick Complete = 83
47 Fitness = 869.0199999999991
48 Ai: 11 Gen: 1
49 Sim Starting
50 Sim over Total pop = 0 Tick Complete = 72
51 Fitness = 797.3199999999996
52 Ai: 12 Gen: 1
53 Sim Starting
54 Sim over Total pop = 0 Tick Complete = 116
55 Fitness = 825.0799999999954
56 Ai: 13 Gen: 1
57 Sim Starting
58 Sim over Total pop = 0 Tick Complete = 929
59 Fitness = 1780.290000000041
60 Ai: 14 Gen: 1
61 Sim Starting
62 Sim over Total pop = 0 Tick Complete = 230
63 Fitness = 805.8999999999711
64 Ai: 15 Gen: 1
65 Sim Starting
66 Sim over Total pop = 0 Tick Complete = 100
67 Fitness = 842.9799999999959
68 Ai: 16 Gen: 1
69 Sim Starting
70 Sim over Total pop = 0 Tick Complete = 112
71 Fitness = 186.979999999993
72 Ai: 17 Gen: 1
73 Sim Starting
74 Sim over Total pop = 0 Tick Complete = 189
75 Fitness = 787.1999999999988
76 Ai: 18 Gen: 1
77 Sim Starting
78 Sim over Total pop = 0 Tick Complete = 243
79 Fitness = 933.1699999999792
80 Ai: 19 Gen: 1
81 Sim Starting
82 Sim over Total pop = 0 Tick Complete = 107
83 Fitness = 172.27999999999605
84 Ai: 20 Gen: 1
85 Sim Starting
```

```
86 Sim over Total pop = 0 Tick Complete = 70
87 Fitness = 891.0
88 Ai: 21 Gen: 1
89 Sim Starting
90 Sim over Total pop = 0 Tick Complete = 1076
91 Fitness = 1571.859999999949
92 Ai: 22 Gen: 1
93 Sim Starting
94 Sim over Total pop = 0 Tick Complete = 129
95 Fitness = 791.9199999999871
96 Ai: 23 Gen: 1
97 Sim Starting
98 Sim over Total pop = 0 Tick Complete = 70
99 Fitness = 896.0
100 Ai: 24 Gen: 1
101 Sim Starting
102 Sim over Total pop = 0 Tick Complete = 442
103 Fitness = 1635.2299999999884
104 Ai: 25 Gen: 1
105 Sim Starting
106 Sim over Total pop = 0 Tick Complete = 292
107 Fitness = 892.459999999947
108 Ai: 26 Gen: 1
109 Sim Starting
110
111 Name: 0
112 X: 312
113 Y: 698
114 civpop: 5
115 trooppop: 4
116 rawresources: 5037.4000000000015
117 equipment: 2606.0
118 rate: 2.0
119 popraw: 0
120 popequip: 0.5
121 %TroopsSupplied: 100
122 Sim over Total pop = 0 Tick Complete = 1086
123 Fitness = 1631.8499999999894
124 Ai: 27 Gen: 1
125 Sim Starting
126 Sim over Total pop = 0 Tick Complete = 408
127 Fitness = 1230.5900000000015
128 Ai: 28 Gen: 1
129 Sim Starting
```

```
130 Sim over Total pop = 0 Tick Complete = 123
131 Fitness = 254.5799999998205
132 Ai: 29 Gen: 1
133 Sim Starting
134 Sim over Total pop = 0 Tick Complete = 383
135 Fitness = 1309.2400000000002
136 Ai: 30 Gen: 1
137 Sim Starting
138 Sim over Total pop = 0 Tick Complete = 117
139 Fitness = 672.989999999951
140 Ai: 31 Gen: 1
141 Sim Starting
142 Sim over Total pop = 0 Tick Complete = 408
143 Fitness = 1226.6000000000085
144 Ai: 32 Gen: 1
145 Sim Starting
146 Sim over Total pop = 0 Tick Complete = 99
147 Fitness = 595.619999999947
148 Ai: 33 Gen: 1
149 Sim Starting
150 Sim over Total pop = 0 Tick Complete = 91
151 Fitness = 1023.049999999961
152 Ai: 34 Gen: 1
153 Sim Starting
154 Sim over Total pop = 0 Tick Complete = 161
155 Fitness = 873.749999999964
156 Ai: 35 Gen: 1
157 Sim Starting
158 Sim over Total pop = 0 Tick Complete = 365
159 Fitness = 1266.129999999842
160 Ai: 36 Gen: 1
161 Sim Starting
162 Sim over Total pop = 0 Tick Complete = 70
163 Fitness = 825.369999999997
164 Ai: 37 Gen: 1
165 Sim Starting
166 Sim over Total pop = 0 Tick Complete = 71
167 Fitness = 116.5999999999873
168 Ai: 38 Gen: 1
169 Sim Starting
170 Sim over Total pop = 0 Tick Complete = 105
171 Fitness = 934.699999999982
172 Ai: 39 Gen: 1
173 Sim Starting
```

```
174 Sim over Total pop = 0 Tick Complete = 1010
175 Fitness = 2753.479999999966
176 Ai: 40 Gen: 1
177 Sim Starting
178 Sim over Total pop = 0 Tick Complete = 136
179 Fitness = 868.149999999928
180 Ai: 41 Gen: 1
181 Sim Starting
182 Sim over Total pop = 0 Tick Complete = 280
183 Fitness = 1250.9199999999896
184 Ai: 42 Gen: 1
185 Sim Starting
186 Sim over Total pop = 0 Tick Complete = 70
187 Fitness = 825.0
188 Ai: 43 Gen: 1
189 Sim Starting
190 Sim over Total pop = 0 Tick Complete = 370
191 Fitness = 1063.2599999999888
192 Ai: 44 Gen: 1
193 Sim Starting
194 Sim over Total pop = 0 Tick Complete = 64
195 Fitness = 157.4599999999373
196 Ai: 45 Gen: 1
197 Sim Starting
198 Sim over Total pop = 0 Tick Complete = 200
199 Fitness = 1213.409999999942
200 Ai: 46 Gen: 1
201 Sim Starting
202 Sim over Total pop = 0 Tick Complete = 302
203 Fitness = 1008.3099999999846
204 Ai: 47 Gen: 1
205 Sim Starting
206 Sim over Total pop = 0 Tick Complete = 898
207 Fitness = 1001.6100000000098
208 Ai: 48 Gen: 1
209 Sim Starting
210 Sim over Total pop = 0 Tick Complete = 413
211 Fitness = 701.6899999999935
212 Ai: 49 Gen: 1
213 Sim Starting
214
215 Name: 0
216 X: 1086
217 Y: 137
```

```
218 civpop: 3
219 trooppop: 2
220 rawresources: 0
221 equipment: 774.999999999986
222 rate: 1.9
223 popraw: 0
224 popequip: 0.5
225 %TroopsSupplied: 100
226 Sim over Total pop = 0 Tick Complete = 823
227 Fitness = 2175.1999999998575
228 Mean Fitness of Gen 1 is 966.274999999885 and
best fitness 2753.479999999966
229 Ai: 0 Gen: 2
230 Sim Starting
231 Sim over Total pop = 0 Tick Complete = 228
232 Fitness = 585.8099999999922
233 Ai: 1 Gen: 2
234 Sim Starting
235 Sim over Total pop = 0 Tick Complete = 197
236 Fitness = 511.5599999998625
237 Ai: 2 Gen: 2
238 Sim Starting
239 Sim over Total pop = 0 Tick Complete = 70
240 Fitness = 896.0
241 Ai: 3 Gen: 2
242 Sim Starting
243 Sim over Total pop = 0 Tick Complete = 278
244 Fitness = 1132.689999999578
245 Ai: 4 Gen: 2
246 Sim Starting
247 Sim over Total pop = 0 Tick Complete = 105
248 Fitness = 1081.7200000000007
249 Ai: 5 Gen: 2
250 Sim Starting
251 Sim over Total pop = 0 Tick Complete = 70
252 Fitness = 773.409999999996
253 Ai: 6 Gen: 2
254 Sim Starting
255 Sim over Total pop = 0 Tick Complete = 127
256 Fitness = 938.309999999985
257 Ai: 7 Gen: 2
258 Sim Starting
259 Sim over Total pop = 0 Tick Complete = 648
260 Fitness = 1671.4099999999587
```

```
261 Ai: 8 Gen: 2
262 Sim Starting
263 Sim over Total pop = 0 Tick Complete = 148
264 Fitness = 877.569999999993
265 Ai: 9 Gen: 2
266 Sim Starting
267 Sim over Total pop = 0 Tick Complete = 115
268 Fitness = 853.209999999988
269 Ai: 10 Gen: 2
270 Sim Starting
271 Sim over Total pop = 0 Tick Complete = 715
272 Fitness = 1792.7300000000196
273 Ai: 11 Gen: 2
274 Sim Starting
275 Sim over Total pop = 2 Tick Complete = 2001
276 Fitness = 2902.7899999998576
277 Ai: 12 Gen: 2
278 Sim Starting
279 Sim over Total pop = 0 Tick Complete = 517
280 Fitness = 1831.009999999563
281 Ai: 13 Gen: 2
282 Sim Starting
283 Sim over Total pop = 0 Tick Complete = 66
284 Fitness = 205.479999999974
285 Ai: 14 Gen: 2
286 Sim Starting
287 Sim over Total pop = 0 Tick Complete = 151
288 Fitness = 1109.0500000000022
289 Ai: 15 Gen: 2
290 Sim Starting
291 Sim over Total pop = 0 Tick Complete = 163
292 Fitness = 940.179999999919
293 Ai: 16 Gen: 2
294 Sim Starting
295 Sim over Total pop = 0 Tick Complete = 160
296 Fitness = 854.719999999945
297 Ai: 17 Gen: 2
298 Sim Starting
299 Sim over Total pop = 0 Tick Complete = 712
300 Fitness = 1453.9899999999889
301 Ai: 18 Gen: 2
302 Sim Starting
303 Sim over Total pop = 0 Tick Complete = 328
304 Fitness = 628.289999999729
```

```
305 Ai: 19 Gen: 2
306 Sim Starting
307 Sim over Total pop = 0 Tick Complete = 59
308 Fitness = 78.82999999999365
309 Ai: 20 Gen: 2
310 Sim Starting
311 Sim over Total pop = 0 Tick Complete = 654
312 Fitness = 2665.900000000001
313 Ai: 21 Gen: 2
314 Sim Starting
315 Sim over Total pop = 0 Tick Complete = 70
316 Fitness = 830.0
317 Ai: 22 Gen: 2
318 Sim Starting
319 Sim over Total pop = 0 Tick Complete = 136
320 Fitness = 289.999999999915
321 Ai: 23 Gen: 2
322 Sim Starting
323 Sim over Total pop = 0 Tick Complete = 810
324 Fitness = 1436.6199999999765
325 Ai: 24 Gen: 2
326 Sim Starting
327 Sim over Total pop = 0 Tick Complete = 70
328 Fitness = 901.0
329 Ai: 25 Gen: 2
330 Sim Starting
331 Sim over Total pop = 0 Tick Complete = 188
332 Fitness = 1019.799999999952
333 Ai: 26 Gen: 2
334 Sim Starting
335 Sim over Total pop = 0 Tick Complete = 70
336 Fitness = 830.0
337 Ai: 27 Gen: 2
338 Sim Starting
339 Sim over Total pop = 0 Tick Complete = 454
340 Fitness = 1160.479999999965
341 Ai: 28 Gen: 2
342 Sim Starting
343
344 Name: 3
345 X: 494
346 Y: 362
347 civpop: 3
348 trooppop: 2
```

```
349 rawresources: 3191.8500000002523
350 equipment: 0
351 rate: 1.1
352 popraw: 0
353 popequip: 0.5
354 %TroopsSupplied: 82
355 Sim over Total pop = 3 Tick Complete = 2001
356 Fitness = 2570.209999999978
357 Ai: 29 Gen: 2
358 Sim Starting
359 Sim over Total pop = 0 Tick Complete = 107
360 Fitness = 577.2099999999839
361 Ai: 30 Gen: 2
362 Sim Starting
363 Sim over Total pop = 0 Tick Complete = 131
364 Fitness = 887.3599999999988
365 Ai: 31 Gen: 2
366 Sim Starting
367 Sim over Total pop = 0 Tick Complete = 449
368 Fitness = 1012.0499999999437
369 Ai: 32 Gen: 2
370 Sim Starting
371 Sim over Total pop = 0 Tick Complete = 143
372 Fitness = 1141.8900000000046
373 Ai: 33 Gen: 2
374 Sim Starting
375 Sim over Total pop = 0 Tick Complete = 61
376 Fitness = 80.0399999999226
377 Ai: 34 Gen: 2
378 Sim Starting
379 Sim over Total pop = 0 Tick Complete = 289
380 Fitness = 1013.969999999779
381 Ai: 35 Gen: 2
382 Sim Starting
383 Sim over Total pop = 0 Tick Complete = 459
384 Fitness = 1266.6700000000194
385 Ai: 36 Gen: 2
386 Sim Starting
387 Sim over Total pop = 0 Tick Complete = 119
388 Fitness = 940.209999999951
389 Ai: 37 Gen: 2
390 Sim Starting
391 Sim over Total pop = 0 Tick Complete = 234
392 Fitness = 1217.579999999987
```

```
393 Ai: 38 Gen: 2
394 Sim Starting
395 Sim over Total pop = 0 Tick Complete = 167
396 Fitness = 952.2800000000043
397 Ai: 39 Gen: 2
398 Sim Starting
399 Sim over Total pop = 0 Tick Complete = 551
400 Fitness = 706.089999999374
401 Ai: 40 Gen: 2
402 Sim Starting
403 Sim over Total pop = 0 Tick Complete = 71
404 Fitness = 206.23999999999012
405 Ai: 41 Gen: 2
406 Sim Starting
407 Sim over Total pop = 0 Tick Complete = 726
408 Fitness = 1703.039999999989
409 Ai: 42 Gen: 2
410 Sim Starting
411 Sim over Total pop = 0 Tick Complete = 959
412 Fitness = 1834.3900000000244
413 Ai: 43 Gen: 2
414 Sim Starting
415 Sim over Total pop = 0 Tick Complete = 825
416 Fitness = 2045.720000000036
417 Ai: 44 Gen: 2
418 Sim Starting
419 Sim over Total pop = 0 Tick Complete = 83
420 Fitness = 731.949999999999
421 Ai: 45 Gen: 2
422 Sim Starting
423 Sim over Total pop = 0 Tick Complete = 442
424 Fitness = 1504.049999999975
425 Ai: 46 Gen: 2
426 Sim Starting
427 Sim over Total pop = 0 Tick Complete = 71
428 Fitness = 367.469999999996
429 Ai: 47 Gen: 2
430 Sim Starting
431 Sim over Total pop = 0 Tick Complete = 489
432 Fitness = 1799.8399999999947
433 Ai: 48 Gen: 2
434 Sim Starting
435 Sim over Total pop = 0 Tick Complete = 245
436 Fitness = 657.9999999999915
```

```
437 Ai: 49 Gen: 2
438 Sim Starting
439 Sim over Total pop = 0 Tick Complete = 412
440 Fitness = 1338.519999999982
441 Mean Fitness of Gen 2 is 1096.146799999988 and
    best fitness 2902.7899999998576
442 Ai: 0 Gen: 3
443 Sim Starting
444 Sim over Total pop = 0 Tick Complete = 881
445 Fitness = 1810.0099999999622
446 Ai: 1 Gen: 3
447 Sim Starting
448 Sim over Total pop = 0 Tick Complete = 130
449 Fitness = 696.6399999999944
450 Ai: 2 Gen: 3
451 Sim Starting
452 Sim over Total pop = 0 Tick Complete = 85
453 Fitness = 846.3099999999943
454 Ai: 3 Gen: 3
455 Sim Starting
456 Sim over Total pop = 0 Tick Complete = 161
457 Fitness = 1138.8999999999937
458 Ai: 4 Gen: 3
459 Sim Starting
460 Sim over Total pop = 0 Tick Complete = 338
461 Fitness = 724.6199999999874
462 Ai: 5 Gen: 3
463 Sim Starting
464 Sim over Total pop = 0 Tick Complete = 70
465 Fitness = 962.0
466 Ai: 6 Gen: 3
467 Sim Starting
468 Sim over Total pop = 0 Tick Complete = 70
469 Fitness = 896.0
470 Ai: 7 Gen: 3
471 Sim Starting
472 Sim over Total pop = 0 Tick Complete = 115
473 Fitness = 866.249999999996
474 Ai: 8 Gen: 3
475 Sim Starting
476 Sim over Total pop = 0 Tick Complete = 97
477 Fitness = 310.9299999999919
478 Ai: 9 Gen: 3
479 Sim Starting
```

```
480 Sim over Total pop = 0 Tick Complete = 66
481 Fitness = 587.6399999999984
482 Ai: 10 Gen: 3
483 Sim Starting
484 Sim over Total pop = 0 Tick Complete = 326
485 Fitness = 1650.1900000000023
486 Ai: 11 Gen: 3
487 Sim Starting
488 Sim over Total pop = 0 Tick Complete = 281
489 Fitness = 1060.8599999999692
490 Ai: 12 Gen: 3
491 Sim Starting
492 Sim over Total pop = 0 Tick Complete = 52
493 Fitness = 156.0199999999674
494 Ai: 13 Gen: 3
495 Sim Starting
496 Sim over Total pop = 0 Tick Complete = 70
497 Fitness = 822.1899999999976
498 Ai: 14 Gen: 3
499 Sim Starting
500 Sim over Total pop = 0 Tick Complete = 182
501 Fitness = 1287.380000000001
502 Ai: 15 Gen: 3
503 Sim Starting
504 Sim over Total pop = 0 Tick Complete = 164
505 Fitness = 818.179999999898
506 Ai: 16 Gen: 3
507 Sim Starting
508 Sim over Total pop = 0 Tick Complete = 1120
509 Fitness = 2960.719999999953
510 Ai: 17 Gen: 3
511 Sim Starting
512 Sim over Total pop = 0 Tick Complete = 490
513 Fitness = 1345.659999999967
514 Ai: 18 Gen: 3
515 Sim Starting
516 Sim over Total pop = 0 Tick Complete = 93
517 Fitness = 646.539999999903
518 Ai: 19 Gen: 3
519 Sim Starting
520 Sim over Total pop = 0 Tick Complete = 120
521 Fitness = 747.82999999998
522 Ai: 20 Gen: 3
523 Sim Starting
```

```
524 Sim over Total pop = 0 Tick Complete = 70
525 Fitness = 1023.0
526 Ai: 21 Gen: 3
527 Sim Starting
528 Sim over Total pop = 0 Tick Complete = 739
529 Fitness = 1514.9099999999855
530 Ai: 22 Gen: 3
531 Sim Starting
532 Sim over Total pop = 0 Tick Complete = 172
533 Fitness = 1080.6799999999935
534 Ai: 23 Gen: 3
535 Sim Starting
536 Sim over Total pop = 0 Tick Complete = 488
537 Fitness = 1297.1199999999935
538 Ai: 24 Gen: 3
539 Sim Starting
540 Sim over Total pop = 0 Tick Complete = 200
541 Fitness = 1043.8799999999865
542 Ai: 25 Gen: 3
543 Sim Starting
544
545 Name: 0
546 X: 76
547 Y: 43
548 civpop: 3
549 trooppop: 2
550 rawresources: 0
551 equipment: 722
552 rate: 2.0
553 popraw: 0
554 popequip: 0.5
555 %TroopsSupplied: 100
556 Sim over Total pop = 0 Tick Complete = 442
557 Fitness = 1190.2299999999987
558 Ai: 26 Gen: 3
559 Sim Starting
560
561 Name: 1
562 X: 151
563 Y: 566
564 civpop: 6
565 trooppop: 4
566 rawresources: 6145.100000000018
567 equipment: 0
```

```
568 rate: 1.3
569 popraw: 0
570 popequip: 0.5
571 %TroopsSupplied: 97
572
573 Name: 0
574 X: 297
575 Y: 594
576 civpop: 17
577 trooppop: 13
578 rawresources: 417.0999999998445
579 equipment: 0
580 rate: 1.4
581 popraw: 0
582 popequip: 0.5
583 %TroopsSupplied: 91
584
585 Name: 1
586 X: 151
587 Y: 566
588 civpop: 6
589 trooppop: 4
590 rawresources: 5349.500000000092
591 equipment: 0
592 rate: 1.3
593 popraw: 0
594 popequip: 0.5
595 %TroopsSupplied: 97
596
597 Name: 1
598 X: 151
599 Y: 566
600 civpop: 6
601 trooppop: 4
602 rawresources: 5092.100000000116
603 equipment: 0
604 rate: 1.3
605 popraw: 0
606 popequip: 0.5
607 %TroopsSupplied: 97
608 Sim over Total pop = 0 Tick Complete = 1264
609 Fitness = 2053.99999999999
610 Ai: 27 Gen: 3
611 Sim Starting
```

```
612
613 Name: 4
614 X: 266
615 Y: 519
616 civpop: 9
617 trooppop: 7
618 rawresources: 292.7499999999659
619 equipment: 0
620 rate: 1.2
621 popraw: 0
622 popequip: 0.5
623 %TroopsSupplied: 77
624 Sim over Total pop = 0 Tick Complete = 687
625 Fitness = 1297.5499999999845
626 Ai: 28 Gen: 3
627 Sim Starting
628 Sim over Total pop = 0 Tick Complete = 286
629 Fitness = 1567.6900000000062
630 Ai: 29 Gen: 3
631 Sim Starting
632 Sim over Total pop = 0 Tick Complete = 261
633 Fitness = 957.6299999999893
634 Ai: 30 Gen: 3
635 Sim Starting
636 Sim over Total pop = 0 Tick Complete = 82
637 Fitness = 670.5099999999921
638 Ai: 31 Gen: 3
639 Sim Starting
640 Sim over Total pop = 0 Tick Complete = 216
641 Fitness = 847.4199999999826
642 Ai: 32 Gen: 3
643 Sim Starting
644 Sim over Total pop = 0 Tick Complete = 93
645 Fitness = 395.1199999999855
646 Ai: 33 Gen: 3
647 Sim Starting
648 Sim over Total pop = 0 Tick Complete = 281
649 Fitness = 953.2200000000043
650 Ai: 34 Gen: 3
651 Sim Starting
652 Sim over Total pop = 0 Tick Complete = 170
653 Fitness = 795.6599999999779
654 Ai: 35 Gen: 3
655 Sim Starting
```

```
656 Sim over Total pop = 0 Tick Complete = 147
657 Fitness = 692.9999999999885
658 Ai: 36 Gen: 3
659 Sim Starting
660 Sim over Total pop = 0 Tick Complete = 96
661 Fitness = 618.859999999991
662 Ai: 37 Gen: 3
663 Sim Starting
664 Sim over Total pop = 0 Tick Complete = 794
665 Fitness = 1487.4299999999873
666 Ai: 38 Gen: 3
667 Sim Starting
668 Sim over Total pop = 0 Tick Complete = 196
669 Fitness = 906.4599999999939
670 Ai: 39 Gen: 3
671 Sim Starting
672 Sim over Total pop = 0 Tick Complete = 1145
673 Fitness = 2006.699999999972
674 Ai: 40 Gen: 3
675 Sim Starting
676 Sim over Total pop = 0 Tick Complete = 453
677 Fitness = 1025.449999999972
678 Ai: 41 Gen: 3
679 Sim Starting
680 Sim over Total pop = 0 Tick Complete = 85
681 Fitness = 458.9399999999883
682 Ai: 42 Gen: 3
683 Sim Starting
684 Sim over Total pop = 0 Tick Complete = 98
685 Fitness = 905.999999999983
686 Ai: 43 Gen: 3
687 Sim Starting
688 Sim over Total pop = 0 Tick Complete = 634
689 Fitness = 1298.1799999999585
690 Ai: 44 Gen: 3
691 Sim Starting
692 Sim over Total pop = 0 Tick Complete = 128
693 Fitness = 973.4199999999898
694 Ai: 45 Gen: 3
695 Sim Starting
696 Sim over Total pop = 0 Tick Complete = 75
697 Fitness = 215.58999999999384
698 Ai: 46 Gen: 3
699 Sim Starting
```

```
700 Sim over Total pop = 0 Tick Complete = 211
701 Fitness = 1120.2799999999947
702 Ai: 47 Gen: 3
703 Sim Starting
704 Sim over Total pop = 0 Tick Complete = 287
705 Fitness = 1429.110000000009
706 Ai: 48 Gen: 3
707 Sim Starting
708 Sim over Total pop = 0 Tick Complete = 369
709 Fitness = 1155.0199999999918
710 Ai: 49 Gen: 3
711 Sim Starting
712 Sim over Total pop = 0 Tick Complete = 628
713 Fitness = 1301.409999999996
714 Mean Fitness of Gen 3 is 1052.386799999895 and
best fitness 2960.719999999953
715 Ai: 0 Gen: 4
716 Sim Starting
717 Sim over Total pop = 0 Tick Complete = 1004
718 Fitness = 1934.379999999464
719 Ai: 1 Gen: 4
720 Sim Starting
721 Sim over Total pop = 0 Tick Complete = 70
722 Fitness = 901.0
723 Ai: 2 Gen: 4
724 Sim Starting
725 Sim over Total pop = 0 Tick Complete = 75
726 Fitness = 352.7799999999344
727 Ai: 3 Gen: 4
728 Sim Starting
729 Sim over Total pop = 0 Tick Complete = 70
730 Fitness = 764.0
731 Ai: 4 Gen: 4
732 Sim Starting
733 Sim over Total pop = 0 Tick Complete = 570
734 Fitness = 1331.339999999942
735 Ai: 5 Gen: 4
736 Sim Starting
737 Sim over Total pop = 0 Tick Complete = 205
738 Fitness = 897.689999999998
739 Ai: 6 Gen: 4
740 Sim Starting
741 Sim over Total pop = 0 Tick Complete = 1208
742 Fitness = 2021.8199999999576
```

```
743 Ai: 7 Gen: 4
744 Sim Starting
745 Sim over Total pop = 0 Tick Complete = 94
746 Fitness = 662.1099999999998
747 Ai: 8 Gen: 4
748 Sim Starting
749 Sim over Total pop = 0 Tick Complete = 114
750 Fitness = 744.1399999999973
751 Ai: 9 Gen: 4
752 Sim Starting
753 Sim over Total pop = 0 Tick Complete = 194
754 Fitness = 825.8399999999932
755 Ai: 10 Gen: 4
756 Sim Starting
757 Sim over Total pop = 0 Tick Complete = 174
758 Fitness = 1100.0799999999952
759 Ai: 11 Gen: 4
760 Sim Starting
761 Sim over Total pop = 0 Tick Complete = 83
762 Fitness = 597.3599999999885
763 Ai: 12 Gen: 4
764 Sim Starting
765 Sim over Total pop = 0 Tick Complete = 337
766 Fitness = 956.329999999812
767 Ai: 13 Gen: 4
768 Sim Starting
769 Sim over Total pop = 0 Tick Complete = 247
770 Fitness = 1302.5800000000013
771 Ai: 14 Gen: 4
772 Sim Starting
773 Sim over Total pop = 0 Tick Complete = 599
774 Fitness = 1572.349999999647
775 Ai: 15 Gen: 4
776 Sim Starting
777 Sim over Total pop = 0 Tick Complete = 70
778 Fitness = 875.199999999989
779 Ai: 16 Gen: 4
780 Sim Starting
781 Sim over Total pop = 0 Tick Complete = 391
782 Fitness = 2037.579999999992
783 Ai: 17 Gen: 4
784 Sim Starting
785 Sim over Total pop = 0 Tick Complete = 70
786 Fitness = 759.0
```

```
787 Ai: 18 Gen: 4
788 Sim Starting
789 Sim over Total pop = 0 Tick Complete = 211
790 Fitness = 1384.0500000000081
791 Ai: 19 Gen: 4
792 Sim Starting
793 Sim over Total pop = 0 Tick Complete = 70
794 Fitness = 759.0
795 Ai: 20 Gen: 4
796 Sim Starting
797 Sim over Total pop = 0 Tick Complete = 152
798 Fitness = 1125.8800000000022
799 Ai: 21 Gen: 4
800 Sim Starting
801 Sim over Total pop = 0 Tick Complete = 70
802 Fitness = 764.0
803 Ai: 22 Gen: 4
804 Sim Starting
805 Sim over Total pop = 0 Tick Complete = 365
806 Fitness = 1079.059999999975
807 Ai: 23 Gen: 4
808 Sim Starting
809 Sim over Total pop = 0 Tick Complete = 140
810 Fitness = 788.1199999999773
811 Ai: 24 Gen: 4
812 Sim Starting
813 Sim over Total pop = 0 Tick Complete = 276
814 Fitness = 619.519999999965
815 Ai: 25 Gen: 4
816 Sim Starting
817 Sim over Total pop = 0 Tick Complete = 1364
818 Fitness = 2835.7700000000071
819 Ai: 26 Gen: 4
820 Sim Starting
821 Sim over Total pop = 0 Tick Complete = 123
822 Fitness = 1149.2900000000038
823 Ai: 27 Gen: 4
824 Sim Starting
825 Sim over Total pop = 0 Tick Complete = 739
826 Fitness = 1007.4999999999945
827 Ai: 28 Gen: 4
828 Sim Starting
829 Sim over Total pop = 0 Tick Complete = 414
830 Fitness = 1147.3599999999826
```

```
831 Ai: 29 Gen: 4
832 Sim Starting
833 Sim over Total pop = 0 Tick Complete = 63
834 Fitness = 93.869999999996
835 Ai: 30 Gen: 4
836 Sim Starting
837 Sim over Total pop = 0 Tick Complete = 51
838 Fitness = 54.40999999999306
839 Ai: 31 Gen: 4
840 Sim Starting
841 Sim over Total pop = 0 Tick Complete = 336
842 Fitness = 893.539999999994
843 Ai: 32 Gen: 4
844 Sim Starting
845 Sim over Total pop = 0 Tick Complete = 61
846 Fitness = 583.0099999999909
847 Ai: 33 Gen: 4
848 Sim Starting
849 Sim over Total pop = 0 Tick Complete = 360
850 Fitness = 914.6399999999924
851 Ai: 34 Gen: 4
852 Sim Starting
853 Sim over Total pop = 0 Tick Complete = 70
854 Fitness = 1033.0
855 Ai: 35 Gen: 4
856 Sim Starting
857 Sim over Total pop = 0 Tick Complete = 70
858 Fitness = 896.0
859 Ai: 36 Gen: 4
860 Sim Starting
861 Sim over Total pop = 0 Tick Complete = 56
862 Fitness = 44.0499999999911
863 Ai: 37 Gen: 4
864 Sim Starting
865 Sim over Total pop = 0 Tick Complete = 86
866 Fitness = 673.3699999999926
867 Ai: 38 Gen: 4
868 Sim Starting
869 Sim over Total pop = 0 Tick Complete = 368
870 Fitness = 1183.67999999999
871 Ai: 39 Gen: 4
872 Sim Starting
873 Sim over Total pop = 0 Tick Complete = 584
874 Fitness = 1611.5299999999806
```

```
875 Ai: 40 Gen: 4
876 Sim Starting
877 Sim over Total pop = 0 Tick Complete = 313
878 Fitness = 1320.0699999999892
879 Ai: 41 Gen: 4
880 Sim Starting
881 Sim over Total pop = 0 Tick Complete = 118
882 Fitness = 977.349999999993
883 Ai: 42 Gen: 4
884 Sim Starting
885 Sim over Total pop = 0 Tick Complete = 168
886 Fitness = 758.2299999999959
887 Ai: 43 Gen: 4
888 Sim Starting
889 Sim over Total pop = 0 Tick Complete = 159
890 Fitness = 845.7099999999688
891 Ai: 44 Gen: 4
892 Sim Starting
893 Sim over Total pop = 0 Tick Complete = 62
894 Fitness = 169.0299999999375
895 Ai: 45 Gen: 4
896 Sim Starting
897
898 Name: 1
899 X: 760
900 Y: 158
901 civpop: 5
902 trooppop: 4
903 rawresources: 1187.3000000000006
904 equipment: 0
905 rate: 1.3
906 popraw: 0
907 popequip: 0.5
908 %TroopsSupplied: 81
909
910 Name: 1
911 X: 760
912 Y: 158
913 civpop: 5
914 trooppop: 4
915 rawresources: 1081.3000000000006
916 equipment: 0
917 rate: 1.3
918 popraw: 0
```

```
919 popequip: 0.5
920 %TroopsSupplied: 81
921 Sim over Total pop = 0 Tick Complete = 1453
922 Fitness = 3086.1799999999585
923 Ai: 46 Gen: 4
924 Sim Starting
925 Sim over Total pop = 0 Tick Complete = 1791
926 Fitness = 2309.4799999999555
927 Ai: 47 Gen: 4
928 Sim Starting
929 Sim over Total pop = 0 Tick Complete = 86
930 Fitness = 457.0599999999653
931 Ai: 48 Gen: 4
932 Sim Starting
933 Sim over Total pop = 0 Tick Complete = 405
934 Fitness = 740.799999999999
935 Ai: 49 Gen: 4
936 Sim Starting
937 Sim over Total pop = 0 Tick Complete = 457
938 Fitness = 1530.0699999999986
939 Ai: 50 Gen: 4
940 Sim Starting
941 Sim over Total pop = 0 Tick Complete = 70
942 Fitness = 239.1299999999403
943 Mean Fitness of Gen 4 is 1033.5164705882262 and
best fitness 3086.1799999999585
944 Ai: 0 Gen: 5
945 Sim Starting
946 Sim over Total pop = 0 Tick Complete = 106
947 Fitness = 724.0099999999964
948 Ai: 1 Gen: 5
949 Sim Starting
950 Sim over Total pop = 0 Tick Complete = 77
951 Fitness = 649.799999999991
952 Ai: 2 Gen: 5
953 Sim Starting
954 Sim over Total pop = 0 Tick Complete = 1708
955 Fitness = 3178.890000000129
956 Ai: 3 Gen: 5
957 Sim Starting
958 Sim over Total pop = 0 Tick Complete = 1149
959 Fitness = 1689.2899999999602
960 Ai: 4 Gen: 5
961 Sim Starting
```

```
962 Sim over Total pop = 0 Tick Complete = 1909
963 Fitness = 2733.5800000000082
964 Ai: 5 Gen: 5
965 Sim Starting
966 Sim over Total pop = 0 Tick Complete = 282
967 Fitness = 1227.6899999999919
968 Ai: 6 Gen: 5
969 Sim Starting
970 Sim over Total pop = 0 Tick Complete = 358
971 Fitness = 973.0499999999713
972 Ai: 7 Gen: 5
973 Sim Starting
974 Sim over Total pop = 0 Tick Complete = 65
975 Fitness = 630.7599999999908
976 Ai: 8 Gen: 5
977 Sim Starting
978 Sim over Total pop = 0 Tick Complete = 92
979 Fitness = 568.499999999987
980 Ai: 9 Gen: 5
981 Sim Starting
982 Sim over Total pop = 0 Tick Complete = 118
983 Fitness = 861.2899999999993
984 Ai: 10 Gen: 5
985 Sim Starting
986 Sim over Total pop = 0 Tick Complete = 92
987 Fitness = 747.3799999999881
988 Ai: 11 Gen: 5
989 Sim Starting
990 Sim over Total pop = 0 Tick Complete = 172
991 Fitness = 377.16999999999206
992 Ai: 12 Gen: 5
993 Sim Starting
994 Sim over Total pop = 0 Tick Complete = 86
995 Fitness = 554.1299999999967
996 Ai: 13 Gen: 5
997 Sim Starting
998 Sim over Total pop = 0 Tick Complete = 64
999 Fitness = 78.3999999999933
1000 Ai: 14 Gen: 5
1001 Sim Starting
1002 Sim over Total pop = 0 Tick Complete = 513
1003 Fitness = 1631.2100000000048
1004 Ai: 15 Gen: 5
1005 Sim Starting
```

```
1006 Sim over Total pop = 0 Tick Complete = 533
1007 Fitness = 1071.939999999999
1008 Ai: 16 Gen: 5
1009 Sim Starting
1010 Sim over Total pop = 0 Tick Complete = 71
1011 Fitness = 713.1999999999991
1012 Ai: 17 Gen: 5
1013 Sim Starting
1014 Sim over Total pop = 0 Tick Complete = 70
1015 Fitness = 957.0
1016 Ai: 18 Gen: 5
1017 Sim Starting
1018 Sim over Total pop = 0 Tick Complete = 70
1019 Fitness = 901.0
1020 Ai: 19 Gen: 5
1021 Sim Starting
1022 Sim over Total pop = 0 Tick Complete = 265
1023 Fitness = 818.2399999999902
1024 Ai: 20 Gen: 5
1025 Sim Starting
1026 Sim over Total pop = 0 Tick Complete = 202
1027 Fitness = 1369.4599999999798
1028 Ai: 21 Gen: 5
1029 Sim Starting
1030 Sim over Total pop = 0 Tick Complete = 157
1031 Fitness = 1244.9099999999883
1032 Ai: 22 Gen: 5
1033 Sim Starting
1034 Sim over Total pop = 0 Tick Complete = 209
1035 Fitness = 1118.2699999999954
1036 Ai: 23 Gen: 5
1037 Sim Starting
1038 Sim over Total pop = 0 Tick Complete = 103
1039 Fitness = 277.9799999999955
1040 Ai: 24 Gen: 5
1041 Sim Starting
1042 Sim over Total pop = 0 Tick Complete = 192
1043 Fitness = 1023.4399999999929
1044 Ai: 25 Gen: 5
1045 Sim Starting
1046 Sim over Total pop = 0 Tick Complete = 135
1047 Fitness = 1050.8100000000045
1048 Ai: 26 Gen: 5
1049 Sim Starting
```

```
1050 Sim over Total pop = 0 Tick Complete = 112
1051 Fitness = 891.8499999999996
1052 Ai: 27 Gen: 5
1053 Sim Starting
1054 Sim over Total pop = 0 Tick Complete = 264
1055 Fitness = 884.3600000000049
1056 Ai: 28 Gen: 5
1057 Sim Starting
1058 Sim over Total pop = 0 Tick Complete = 70
1059 Fitness = 764.0
1060 Ai: 29 Gen: 5
1061 Sim Starting
1062 Sim over Total pop = 0 Tick Complete = 70
1063 Fitness = 825.0
1064 Ai: 30 Gen: 5
1065 Sim Starting
1066 Sim over Total pop = 0 Tick Complete = 287
1067 Fitness = 324.2499999999931
1068 Ai: 31 Gen: 5
1069 Sim Starting
1070 Sim over Total pop = 0 Tick Complete = 768
1071 Fitness = 1192.7599999999811
1072 Ai: 32 Gen: 5
1073 Sim Starting
1074 Sim over Total pop = 0 Tick Complete = 508
1075 Fitness = 1484.1700000000317
1076 Ai: 33 Gen: 5
1077 Sim Starting
1078 Sim over Total pop = 0 Tick Complete = 149
1079 Fitness = 940.1399999999851
1080 Ai: 34 Gen: 5
1081 Sim Starting
1082 Sim over Total pop = 0 Tick Complete = 850
1083 Fitness = 1932.3999999999105
1084 Ai: 35 Gen: 5
1085 Sim Starting
1086 Sim over Total pop = 0 Tick Complete = 326
1087 Fitness = 817.7299999999957
1088 Ai: 36 Gen: 5
1089 Sim Starting
1090 Sim over Total pop = 0 Tick Complete = 98
1091 Fitness = 956.9600000000001
1092 Ai: 37 Gen: 5
1093 Sim Starting
```

```
1094 Sim over Total pop = 0 Tick Complete = 170
1095 Fitness = 596.5599999999927
1096 Ai: 38 Gen: 5
1097 Sim Starting
1098 Sim over Total pop = 0 Tick Complete = 517
1099 Fitness = 1421.0699999999772
1100 Ai: 39 Gen: 5
1101 Sim Starting
1102 Sim over Total pop = 0 Tick Complete = 487
1103 Fitness = 1143.9599999999878
1104 Ai: 40 Gen: 5
1105 Sim Starting
1106 Sim over Total pop = 0 Tick Complete = 437
1107 Fitness = 1124.2800000000006
1108 Ai: 41 Gen: 5
1109 Sim Starting
1110 Sim over Total pop = 0 Tick Complete = 456
1111 Fitness = 669.779999999999
1112 Ai: 42 Gen: 5
1113 Sim Starting
1114 Sim over Total pop = 0 Tick Complete = 634
1115 Fitness = 975.2499999999935
1116 Ai: 43 Gen: 5
1117 Sim Starting
1118 Sim over Total pop = 0 Tick Complete = 717
1119 Fitness = 2024.990000000031
1120 Ai: 44 Gen: 5
1121 Sim Starting
1122 Sim over Total pop = 0 Tick Complete = 1098
1123 Fitness = 2030.8699999999876
1124 Ai: 45 Gen: 5
1125 Sim Starting
1126 Sim over Total pop = 0 Tick Complete = 116
1127 Fitness = 575.9299999999885
1128 Ai: 46 Gen: 5
1129 Sim Starting
1130 Sim over Total pop = 2 Tick Complete = 2001
1131 Fitness = 3498.699999999854
1132 Ai: 47 Gen: 5
1133 Sim Starting
1134 Sim over Total pop = 0 Tick Complete = 250
1135 Fitness = 932.0999999999956
1136 Ai: 48 Gen: 5
1137 Sim Starting
```

```
1138 Sim over Total pop = 0 Tick Complete = 207
1139 Fitness = 1479.5300000000004
1140 Ai: 49 Gen: 5
1141 Sim Starting
1142 Sim over Total pop = 0 Tick Complete = 79
1143 Fitness = 171.55999999998951
1144 Mean Fitness of Gen 5 is 1096.591999999944 and
best fitness 3498.699999999854
1145 Ai: 0 Gen: 6
1146 Sim Starting
1147 Sim over Total pop = 0 Tick Complete = 93
1148 Fitness = 623.979999999985
1149 Ai: 1 Gen: 6
1150 Sim Starting
1151 Sim over Total pop = 0 Tick Complete = 202
1152 Fitness = 824.259999999943
1153 Ai: 2 Gen: 6
1154 Sim Starting
1155 Sim over Total pop = 0 Tick Complete = 696
1156 Fitness = 1446.429999999973
1157 Ai: 3 Gen: 6
1158 Sim Starting
1159 Sim over Total pop = 0 Tick Complete = 516
1160 Fitness = 865.1699999999572
1161 Ai: 4 Gen: 6
1162 Sim Starting
1163 Sim over Total pop = 0 Tick Complete = 280
1164 Fitness = 1509.8300000000006
1165 Ai: 5 Gen: 6
1166 Sim Starting
1167 Sim over Total pop = 0 Tick Complete = 91
1168 Fitness = 694.759999999998
1169 Ai: 6 Gen: 6
1170 Sim Starting
1171 Sim over Total pop = 0 Tick Complete = 603
1172 Fitness = 881.5299999999638
1173 Ai: 7 Gen: 6
1174 Sim Starting
1175 Sim over Total pop = 0 Tick Complete = 58
1176 Fitness = 137.3499999999971
1177 Ai: 8 Gen: 6
1178 Sim Starting
1179 Sim over Total pop = 0 Tick Complete = 89
1180 Fitness = 724.9199999999987
```

```
1181 Ai: 9 Gen: 6
1182 Sim Starting
1183 Sim over Total pop = 0 Tick Complete = 60
1184 Fitness = 514.2799999999988
1185 Ai: 10 Gen: 6
1186 Sim Starting
1187 Sim over Total pop = 0 Tick Complete = 98
1188 Fitness = 153.40999999999894
1189 Ai: 11 Gen: 6
1190 Sim Starting
1191 Sim over Total pop = 0 Tick Complete = 460
1192 Fitness = 975.6800000000063
1193 Ai: 12 Gen: 6
1194 Sim Starting
1195 Sim over Total pop = 0 Tick Complete = 608
1196 Fitness = 1458.4899999999948
1197 Ai: 13 Gen: 6
1198 Sim Starting
1199 Sim over Total pop = 3 Tick Complete = 2001
1200 Fitness = 3516.620000000159
1201 Ai: 14 Gen: 6
1202 Sim Starting
1203 Sim over Total pop = 0 Tick Complete = 83
1204 Fitness = 386.399999999995
1205 Ai: 15 Gen: 6
1206 Sim Starting
1207 Sim over Total pop = 0 Tick Complete = 586
1208 Fitness = 990.0199999999609
1209 Ai: 16 Gen: 6
1210 Sim Starting
1211 Sim over Total pop = 0 Tick Complete = 307
1212 Fitness = 1063.2600000000082
1213 Ai: 17 Gen: 6
1214 Sim Starting
1215 Sim over Total pop = 0 Tick Complete = 131
1216 Fitness = 329.3999999999276
1217 Ai: 18 Gen: 6
1218 Sim Starting
1219 Sim over Total pop = 0 Tick Complete = 70
1220 Fitness = 759.0
1221 Ai: 19 Gen: 6
1222 Sim Starting
1223 Sim over Total pop = 0 Tick Complete = 336
1224 Fitness = 909.699999999971
```

```
1225 Ai: 20 Gen: 6
1226 Sim Starting
1227 Sim over Total pop = 0 Tick Complete = 70
1228 Fitness = 830.0
1229 Ai: 21 Gen: 6
1230 Sim Starting
1231 Sim over Total pop = 0 Tick Complete = 70
1232 Fitness = 891.0
1233 Ai: 22 Gen: 6
1234 Sim Starting
1235 Sim over Total pop = 0 Tick Complete = 70
1236 Fitness = 896.0
1237 Ai: 23 Gen: 6
1238 Sim Starting
1239 Sim over Total pop = 0 Tick Complete = 135
1240 Fitness = 1002.0099999999934
1241 Ai: 24 Gen: 6
1242 Sim Starting
1243 Sim over Total pop = 0 Tick Complete = 558
1244 Fitness = 1842.8400000000142
1245 Ai: 25 Gen: 6
1246 Sim Starting
1247 Sim over Total pop = 0 Tick Complete = 82
1248 Fitness = 673.3099999999906
1249 Ai: 26 Gen: 6
1250 Sim Starting
1251 Sim over Total pop = 0 Tick Complete = 203
1252 Fitness = 1213.4299999999944
1253 Ai: 27 Gen: 6
1254 Sim Starting
1255 Sim over Total pop = 0 Tick Complete = 70
1256 Fitness = 962.0
1257 Ai: 28 Gen: 6
1258 Sim Starting
1259 Sim over Total pop = 0 Tick Complete = 712
1260 Fitness = 1186.0799999999886
1261 Ai: 29 Gen: 6
1262 Sim Starting
1263 Sim over Total pop = 0 Tick Complete = 70
1264 Fitness = 1033.0
1265 Ai: 30 Gen: 6
1266 Sim Starting
1267 Sim over Total pop = 0 Tick Complete = 81
1268 Fitness = 929.6799999999998
```

```
1269 Ai: 31 Gen: 6
1270 Sim Starting
1271 Sim over Total pop = 0 Tick Complete = 113
1272 Fitness = 825.3699999999918
1273 Ai: 32 Gen: 6
1274 Sim Starting
1275 Sim over Total pop = 0 Tick Complete = 383
1276 Fitness = 1592.3799999999933
1277 Ai: 33 Gen: 6
1278 Sim Starting
1279 Sim over Total pop = 0 Tick Complete = 93
1280 Fitness = 632.5599999999971
1281 Ai: 34 Gen: 6
1282 Sim Starting
1283 Sim over Total pop = 0 Tick Complete = 482
1284 Fitness = 1084.5299999999818
1285 Ai: 35 Gen: 6
1286 Sim Starting
1287 Sim over Total pop = 0 Tick Complete = 93
1288 Fitness = 866.9699999999984
1289 Ai: 36 Gen: 6
1290 Sim Starting
1291 Sim over Total pop = 0 Tick Complete = 603
1292 Fitness = 986.0599999999807
1293 Ai: 37 Gen: 6
1294 Sim Starting
1295 Sim over Total pop = 0 Tick Complete = 714
1296 Fitness = 1111.210000000011
1297 Ai: 38 Gen: 6
1298 Sim Starting
1299 Sim over Total pop = 0 Tick Complete = 122
1300 Fitness = 371.0399999999456
1301 Ai: 39 Gen: 6
1302 Sim Starting
1303 Sim over Total pop = 0 Tick Complete = 572
1304 Fitness = 1035.7799999999856
1305 Ai: 40 Gen: 6
1306 Sim Starting
1307 Sim over Total pop = 0 Tick Complete = 61
1308 Fitness = 561.639999999999
1309 Ai: 41 Gen: 6
1310 Sim Starting
1311 Sim over Total pop = 0 Tick Complete = 182
1312 Fitness = 733.9199999999942
```

```
1313 Ai: 42 Gen: 6
1314 Sim Starting
1315 Sim over Total pop = 0 Tick Complete = 686
1316 Fitness = 1224.2899999999886
1317 Ai: 43 Gen: 6
1318 Sim Starting
1319 Sim over Total pop = 0 Tick Complete = 532
1320 Fitness = 1466.9999999999907
1321 Ai: 44 Gen: 6
1322 Sim Starting
1323 Sim over Total pop = 0 Tick Complete = 80
1324 Fitness = 254.63999999998703
1325 Ai: 45 Gen: 6
1326 Sim Starting
1327 Sim over Total pop = 0 Tick Complete = 469
1328 Fitness = 1747.5500000000243
1329 Ai: 46 Gen: 6
1330 Sim Starting
1331 Sim over Total pop = 0 Tick Complete = 377
1332 Fitness = 872.3599999999908
1333 Ai: 47 Gen: 6
1334 Sim Starting
1335 Sim over Total pop = 0 Tick Complete = 500
1336 Fitness = 1496.4599999999928
1337 Mean Fitness of Gen 6 is 980.991666666635 and
    best fitness 3516.620000000159
1338 Ai: 0 Gen: 7
1339 Sim Starting
1340 Sim over Total pop = 0 Tick Complete = 70
1341 Fitness = 693.0
1342 Ai: 1 Gen: 7
1343 Sim Starting
1344 Sim over Total pop = 0 Tick Complete = 70
1345 Fitness = 703.0
1346 Ai: 2 Gen: 7
1347 Sim Starting
1348 Sim over Total pop = 0 Tick Complete = 64
1349 Fitness = 620.3699999999988
1350 Ai: 3 Gen: 7
1351 Sim Starting
1352 Sim over Total pop = 0 Tick Complete = 409
1353 Fitness = 1211.6399999999987
1354 Ai: 4 Gen: 7
1355 Sim Starting
```

```
1356 Sim over Total pop = 0 Tick Complete = 111
1357 Fitness = 745.7799999999987
1358 Ai: 5 Gen: 7
1359 Sim Starting
1360 Sim over Total pop = 0 Tick Complete = 232
1361 Fitness = 507.5999999999915
1362 Ai: 6 Gen: 7
1363 Sim Starting
1364 Sim over Total pop = 0 Tick Complete = 166
1365 Fitness = 1012.0299999999941
1366 Ai: 7 Gen: 7
1367 Sim Starting
1368 Sim over Total pop = 0 Tick Complete = 341
1369 Fitness = 635.9899999999916
1370 Ai: 8 Gen: 7
1371 Sim Starting
1372 Sim over Total pop = 0 Tick Complete = 476
1373 Fitness = 1688.6799999999562
1374 Ai: 9 Gen: 7
1375 Sim Starting
1376 Sim over Total pop = 0 Tick Complete = 486
1377 Fitness = 1402.7199999999796
1378 Ai: 10 Gen: 7
1379 Sim Starting
1380 Sim over Total pop = 0 Tick Complete = 159
1381 Fitness = 881.999999999978
1382 Ai: 11 Gen: 7
1383 Sim Starting
1384 Sim over Total pop = 0 Tick Complete = 71
1385 Fitness = 1078.58
1386 Ai: 12 Gen: 7
1387 Sim Starting
1388 Sim over Total pop = 0 Tick Complete = 131
1389 Fitness = 277.1599999999394
1390 Ai: 13 Gen: 7
1391 Sim Starting
1392 Sim over Total pop = 0 Tick Complete = 613
1393 Fitness = 1401.4499999999837
1394 Ai: 14 Gen: 7
1395 Sim Starting
1396 Sim over Total pop = 0 Tick Complete = 605
1397 Fitness = 1457.3799999999987
1398 Ai: 15 Gen: 7
1399 Sim Starting
```

```
1400 Sim over Total pop = 0 Tick Complete = 125
1401 Fitness = 314.1999999999944
1402 Ai: 16 Gen: 7
1403 Sim Starting
1404 Sim over Total pop = 0 Tick Complete = 204
1405 Fitness = 1028.819999999991
1406 Ai: 17 Gen: 7
1407 Sim Starting
1408 Sim over Total pop = 0 Tick Complete = 70
1409 Fitness = 845.0
1410 Ai: 18 Gen: 7
1411 Sim Starting
1412 Sim over Total pop = 0 Tick Complete = 396
1413 Fitness = 1166.529999999992
1414 Ai: 19 Gen: 7
1415 Sim Starting
1416 Sim over Total pop = 0 Tick Complete = 204
1417 Fitness = 687.6600000000044
1418 Ai: 20 Gen: 7
1419 Sim Starting
1420 Sim over Total pop = 0 Tick Complete = 222
1421 Fitness = 512.949999999889
1422 Ai: 21 Gen: 7
1423 Sim Starting
1424 Sim over Total pop = 0 Tick Complete = 233
1425 Fitness = 270.399999999982
1426 Ai: 22 Gen: 7
1427 Sim Starting
1428 Sim over Total pop = 0 Tick Complete = 890
1429 Fitness = 2535.899999999937
1430 Ai: 23 Gen: 7
1431 Sim Starting
1432 Sim over Total pop = 0 Tick Complete = 61
1433 Fitness = 161.8699999999762
1434 Ai: 24 Gen: 7
1435 Sim Starting
1436 Sim over Total pop = 0 Tick Complete = 68
1437 Fitness = 128.0799999999963
1438 Ai: 25 Gen: 7
1439 Sim Starting
1440 Sim over Total pop = 0 Tick Complete = 190
1441 Fitness = 397.88999999998566
1442 Ai: 26 Gen: 7
1443 Sim Starting
```

```
1444 Sim over Total pop = 0 Tick Complete = 176
1445 Fitness = 590.7399999999918
1446 Ai: 27 Gen: 7
1447 Sim Starting
1448 Sim over Total pop = 0 Tick Complete = 221
1449 Fitness = 1017.5299999999975
1450 Ai: 28 Gen: 7
1451 Sim Starting
1452 Sim over Total pop = 0 Tick Complete = 70
1453 Fitness = 977.0
1454 Ai: 29 Gen: 7
1455 Sim Starting
1456 Sim over Total pop = 0 Tick Complete = 155
1457 Fitness = 795.209999999993
1458 Ai: 30 Gen: 7
1459 Sim Starting
1460 Sim over Total pop = 0 Tick Complete = 513
1461 Fitness = 1103.5199999999888
1462 Ai: 31 Gen: 7
1463 Sim Starting
1464 Sim over Total pop = 0 Tick Complete = 141
1465 Fitness = 687.179999999943
1466 Ai: 32 Gen: 7
1467 Sim Starting
1468 Sim over Total pop = 0 Tick Complete = 102
1469 Fitness = 459.2499999999853
1470 Ai: 33 Gen: 7
1471 Sim Starting
1472 Sim over Total pop = 0 Tick Complete = 67
1473 Fitness = 701.8999999999996
1474 Ai: 34 Gen: 7
1475 Sim Starting
1476 Sim over Total pop = 0 Tick Complete = 55
1477 Fitness = 106.0299999999234
1478 Ai: 35 Gen: 7
1479 Sim Starting
1480 Sim over Total pop = 0 Tick Complete = 158
1481 Fitness = 760.569999999995
1482 Ai: 36 Gen: 7
1483 Sim Starting
1484 Sim over Total pop = 0 Tick Complete = 345
1485 Fitness = 1065.4799999999789
1486 Ai: 37 Gen: 7
1487 Sim Starting
```

```
1488 Sim over Total pop = 0 Tick Complete = 350
1489 Fitness = 1060.36999999999699
1490 Ai: 38 Gen: 7
1491 Sim Starting
1492 Sim over Total pop = 0 Tick Complete = 238
1493 Fitness = 862.5999999999913
1494 Ai: 39 Gen: 7
1495 Sim Starting
1496 Sim over Total pop = 0 Tick Complete = 160
1497 Fitness = 1382.4699999999966
1498 Ai: 40 Gen: 7
1499 Sim Starting
1500 Sim over Total pop = 0 Tick Complete = 70
1501 Fitness = 1094.0
1502 Ai: 41 Gen: 7
1503 Sim Starting
1504 Sim over Total pop = 0 Tick Complete = 1008
1505 Fitness = 1475.3600000000283
1506 Ai: 42 Gen: 7
1507 Sim Starting
1508 Sim over Total pop = 0 Tick Complete = 631
1509 Fitness = 2113.890000000013
1510 Ai: 43 Gen: 7
1511 Sim Starting
1512 Sim over Total pop = 2 Tick Complete = 2001
1513 Fitness = 2459.629999999958
1514 Ai: 44 Gen: 7
1515 Sim Starting
1516 Sim over Total pop = 0 Tick Complete = 62
1517 Fitness = 102.8899999999966
1518 Ai: 45 Gen: 7
1519 Sim Starting
1520 Sim over Total pop = 0 Tick Complete = 96
1521 Fitness = 824.6399999999932
1522 Ai: 46 Gen: 7
1523 Sim Starting
1524 Sim over Total pop = 0 Tick Complete = 232
1525 Fitness = 1009.9999999999889
1526 Mean Fitness of Gen 7 is 915.2540425531834 and
    best fitness 2535.899999999937
1527 Ai: 0 Gen: 8
1528 Sim Starting
1529 Sim over Total pop = 0 Tick Complete = 56
1530 Fitness = 318.1699999999998
```

```
1531 Ai: 1 Gen: 8
1532 Sim Starting
1533 Sim over Total pop = 0 Tick Complete = 274
1534 Fitness = 807.7900000000005
1535 Ai: 2 Gen: 8
1536 Sim Starting
1537 Sim over Total pop = 0 Tick Complete = 1181
1538 Fitness = 2692.13000000000238
1539 Ai: 3 Gen: 8
1540 Sim Starting
1541 Sim over Total pop = 0 Tick Complete = 71
1542 Fitness = 322.4899999999966
1543 Ai: 4 Gen: 8
1544 Sim Starting
1545 Sim over Total pop = 0 Tick Complete = 74
1546 Fitness = 630.7699999999921
1547 Ai: 5 Gen: 8
1548 Sim Starting
1549 Sim over Total pop = 0 Tick Complete = 98
1550 Fitness = 547.3399999999825
1551 Ai: 6 Gen: 8
1552 Sim Starting
1553 Sim over Total pop = 0 Tick Complete = 90
1554 Fitness = 525.9099999999939
1555 Ai: 7 Gen: 8
1556 Sim Starting
1557 Sim over Total pop = 0 Tick Complete = 134
1558 Fitness = 640.9699999999964
1559 Ai: 8 Gen: 8
1560 Sim Starting
1561 Sim over Total pop = 0 Tick Complete = 99
1562 Fitness = 699.6599999999962
1563 Ai: 9 Gen: 8
1564 Sim Starting
1565 Sim over Total pop = 0 Tick Complete = 336
1566 Fitness = 1075.0899999999808
1567 Ai: 10 Gen: 8
1568 Sim Starting
1569 Sim over Total pop = 0 Tick Complete = 599
1570 Fitness = 1796.0000000000003
1571 Ai: 11 Gen: 8
1572 Sim Starting
1573 Sim over Total pop = 0 Tick Complete = 1264
1574 Fitness = 2329.4599999998873
```

```
1575 Ai: 12 Gen: 8
1576 Sim Starting
1577 Sim over Total pop = 0 Tick Complete = 70
1578 Fitness = 627.0
1579 Ai: 13 Gen: 8
1580 Sim Starting
1581 Sim over Total pop = 0 Tick Complete = 64
1582 Fitness = 591.239999999993
1583 Ai: 14 Gen: 8
1584 Sim Starting
1585 Sim over Total pop = 0 Tick Complete = 64
1586 Fitness = 78.3499999999467
1587 Ai: 15 Gen: 8
1588 Sim Starting
1589 Sim over Total pop = 0 Tick Complete = 70
1590 Fitness = 703.0
1591 Ai: 16 Gen: 8
1592 Sim Starting
1593 Sim over Total pop = 0 Tick Complete = 70
1594 Fitness = 901.0
1595 Ai: 17 Gen: 8
1596 Sim Starting
1597 Sim over Total pop = 5 Tick Complete = 2001
1598 Fitness = 3274.730000000117
1599 Ai: 18 Gen: 8
1600 Sim Starting
1601 Sim over Total pop = 0 Tick Complete = 397
1602 Fitness = 678.6199999999928
1603 Ai: 19 Gen: 8
1604 Sim Starting
1605 Sim over Total pop = 0 Tick Complete = 110
1606 Fitness = 379.2399999997693
1607 Ai: 20 Gen: 8
1608 Sim Starting
1609 Sim over Total pop = 0 Tick Complete = 293
1610 Fitness = 852.339999999706
1611 Ai: 21 Gen: 8
1612 Sim Starting
1613 Sim over Total pop = 0 Tick Complete = 336
1614 Fitness = 1212.0799999999927
1615 Ai: 22 Gen: 8
1616 Sim Starting
1617 Sim over Total pop = 0 Tick Complete = 192
1618 Fitness = 1036.9899999999966
```

```
1619 Ai: 23 Gen: 8
1620 Sim Starting
1621 Sim over Total pop = 0 Tick Complete = 216
1622 Fitness = 976.709999999995
1623 Ai: 24 Gen: 8
1624 Sim Starting
1625 Sim over Total pop = 0 Tick Complete = 196
1626 Fitness = 708.1899999999948
1627 Ai: 25 Gen: 8
1628 Sim Starting
1629 Sim over Total pop = 0 Tick Complete = 239
1630 Fitness = 895.9499999999887
1631 Ai: 26 Gen: 8
1632 Sim Starting
1633 Sim over Total pop = 0 Tick Complete = 115
1634 Fitness = 878.3699999999969
1635 Ai: 27 Gen: 8
1636 Sim Starting
1637 Sim over Total pop = 0 Tick Complete = 659
1638 Fitness = 1849.3700000000226
1639 Ai: 28 Gen: 8
1640 Sim Starting
1641 Sim over Total pop = 0 Tick Complete = 98
1642 Fitness = 532.7099999999887
1643 Ai: 29 Gen: 8
1644 Sim Starting
1645 Sim over Total pop = 0 Tick Complete = 582
1646 Fitness = 1458.799999999952
1647 Ai: 30 Gen: 8
1648 Sim Starting
1649 Sim over Total pop = 0 Tick Complete = 1796
1650 Fitness = 3086.049999999915
1651 Ai: 31 Gen: 8
1652 Sim Starting
1653 Sim over Total pop = 0 Tick Complete = 178
1654 Fitness = 396.179999999925
1655 Ai: 32 Gen: 8
1656 Sim Starting
1657 Sim over Total pop = 0 Tick Complete = 512
1658 Fitness = 1657.959999999987
1659 Ai: 33 Gen: 8
1660 Sim Starting
1661 Sim over Total pop = 0 Tick Complete = 124
1662 Fitness = 846.049999999969
```

```
1663 Ai: 34 Gen: 8
1664 Sim Starting
1665 Sim over Total pop = 0 Tick Complete = 267
1666 Fitness = 1459.2499999999852
1667 Ai: 35 Gen: 8
1668 Sim Starting
1669 Sim over Total pop = 0 Tick Complete = 260
1670 Fitness = 1200.4099999999835
1671 Ai: 36 Gen: 8
1672 Sim Starting
1673 Sim over Total pop = 2 Tick Complete = 2001
1674 Fitness = 3194.33999999983
1675 Ai: 37 Gen: 8
1676 Sim Starting
1677 Sim over Total pop = 0 Tick Complete = 120
1678 Fitness = 964.999999999973
1679 Ai: 38 Gen: 8
1680 Sim Starting
1681 Sim over Total pop = 0 Tick Complete = 730
1682 Fitness = 1618.4499999999755
1683 Ai: 39 Gen: 8
1684 Sim Starting
1685 Sim over Total pop = 0 Tick Complete = 139
1686 Fitness = 627.2099999999966
1687 Ai: 40 Gen: 8
1688 Sim Starting
1689 Sim over Total pop = 0 Tick Complete = 81
1690 Fitness = 913.6399999999969
1691 Ai: 41 Gen: 8
1692 Sim Starting
1693 Sim over Total pop = 0 Tick Complete = 661
1694 Fitness = 1098.7199999999884
1695 Ai: 42 Gen: 8
1696 Sim Starting
1697 Sim over Total pop = 0 Tick Complete = 611
1698 Fitness = 1786.0499999999502
1699 Ai: 43 Gen: 8
1700 Sim Starting
1701 Sim over Total pop = 0 Tick Complete = 126
1702 Fitness = 894.2199999999925
1703 Ai: 44 Gen: 8
1704 Sim Starting
1705 Sim over Total pop = 0 Tick Complete = 64
1706 Fitness = 86.1999999999858
```

```
1707 Ai: 45 Gen: 8
1708 Sim Starting
1709 Sim over Total pop = 0 Tick Complete = 70
1710 Fitness = 901.0
1711 Ai: 46 Gen: 8
1712 Sim Starting
1713 Sim over Total pop = 0 Tick Complete = 1330
1714 Fitness = 2046.77000000000186
1715 Ai: 47 Gen: 8
1716 Sim Starting
1717 Sim over Total pop = 0 Tick Complete = 609
1718 Fitness = 1889.699999999996
1719 Mean Fitness of Gen 8 is 1139.326458333324 and
    best fitness 3274.730000000117
1720 Ai: 0 Gen: 9
1721 Sim Starting
1722 Sim over Total pop = 0 Tick Complete = 63
1723 Fitness = 579.9699999999901
1724 Ai: 1 Gen: 9
1725 Sim Starting
1726 Sim over Total pop = 0 Tick Complete = 63
1727 Fitness = 273.52999999999656
1728 Ai: 2 Gen: 9
1729 Sim Starting
1730 Sim over Total pop = 0 Tick Complete = 821
1731 Fitness = 1974.459999999994
1732 Ai: 3 Gen: 9
1733 Sim Starting
1734 Sim over Total pop = 0 Tick Complete = 311
1735 Fitness = 1423.489999999996
1736 Ai: 4 Gen: 9
1737 Sim Starting
1738 Sim over Total pop = 0 Tick Complete = 57
1739 Fitness = 190.3799999999983
1740 Ai: 5 Gen: 9
1741 Sim Starting
1742 Sim over Total pop = 0 Tick Complete = 385
1743 Fitness = 1613.1399999999992
1744 Ai: 6 Gen: 9
1745 Sim Starting
1746 Sim over Total pop = 0 Tick Complete = 79
1747 Fitness = 743.4499999999997
1748 Ai: 7 Gen: 9
1749 Sim Starting
```

```
1750 Sim over Total pop = 0 Tick Complete = 265
1751 Fitness = 1518.4400000000144
1752 Ai: 8 Gen: 9
1753 Sim Starting
1754 Sim over Total pop = 0 Tick Complete = 454
1755 Fitness = 1327.319999999988
1756 Ai: 9 Gen: 9
1757 Sim Starting
1758 Sim over Total pop = 0 Tick Complete = 131
1759 Fitness = 534.409999999956
1760 Ai: 10 Gen: 9
1761 Sim Starting
1762 Sim over Total pop = 0 Tick Complete = 720
1763 Fitness = 2272.140000000043
1764 Ai: 11 Gen: 9
1765 Sim Starting
1766 Sim over Total pop = 0 Tick Complete = 190
1767 Fitness = 451.99999999995
1768 Ai: 12 Gen: 9
1769 Sim Starting
1770 Sim over Total pop = 0 Tick Complete = 1601
1771 Fitness = 2543.060000000073
1772 Ai: 13 Gen: 9
1773 Sim Starting
1774 Sim over Total pop = 0 Tick Complete = 133
1775 Fitness = 793.8899999999999
1776 Ai: 14 Gen: 9
1777 Sim Starting
1778 Sim over Total pop = 0 Tick Complete = 423
1779 Fitness = 1427.399999999991
1780 Ai: 15 Gen: 9
1781 Sim Starting
1782 Sim over Total pop = 0 Tick Complete = 389
1783 Fitness = 1226.8699999999642
1784 Ai: 16 Gen: 9
1785 Sim Starting
1786 Sim over Total pop = 0 Tick Complete = 299
1787 Fitness = 1374.6899999999994
1788 Ai: 17 Gen: 9
1789 Sim Starting
1790 Sim over Total pop = 0 Tick Complete = 225
1791 Fitness = 1095.3500000000004
1792 Ai: 18 Gen: 9
1793 Sim Starting
```

```
1794 Sim over Total pop = 0 Tick Complete = 266
1795 Fitness = 1094.32999999999767
1796 Ai: 19 Gen: 9
1797 Sim Starting
1798 Sim over Total pop = 0 Tick Complete = 162
1799 Fitness = 1100.8599999999956
1800 Ai: 20 Gen: 9
1801 Sim Starting
1802 Sim over Total pop = 0 Tick Complete = 1109
1803 Fitness = 1768.6299999999221
1804 Ai: 21 Gen: 9
1805 Sim Starting
1806 Sim over Total pop = 0 Tick Complete = 89
1807 Fitness = 169.1099999999928
1808 Ai: 22 Gen: 9
1809 Sim Starting
1810 Sim over Total pop = 0 Tick Complete = 167
1811 Fitness = 817.7299999999868
1812 Ai: 23 Gen: 9
1813 Sim Starting
1814 Sim over Total pop = 0 Tick Complete = 68
1815 Fitness = 794.3099999999997
1816 Ai: 24 Gen: 9
1817 Sim Starting
1818 Sim over Total pop = 0 Tick Complete = 512
1819 Fitness = 1300.4200000000221
1820 Ai: 25 Gen: 9
1821 Sim Starting
1822 Sim over Total pop = 0 Tick Complete = 103
1823 Fitness = 1000.0899999999999
1824 Ai: 26 Gen: 9
1825 Sim Starting
1826 Sim over Total pop = 0 Tick Complete = 217
1827 Fitness = 820.6899999999858
1828 Ai: 27 Gen: 9
1829 Sim Starting
1830 Sim over Total pop = 0 Tick Complete = 70
1831 Fitness = 474.6899999999982
1832 Ai: 28 Gen: 9
1833 Sim Starting
1834 Sim over Total pop = 0 Tick Complete = 70
1835 Fitness = 825.0
1836 Ai: 29 Gen: 9
1837 Sim Starting
```

```
1838 Sim over Total pop = 0 Tick Complete = 85
1839 Fitness = 417.5299999999978
1840 Ai: 30 Gen: 9
1841 Sim Starting
1842 Sim over Total pop = 0 Tick Complete = 171
1843 Fitness = 978.4599999999949
1844 Ai: 31 Gen: 9
1845 Sim Starting
1846 Sim over Total pop = 0 Tick Complete = 70
1847 Fitness = 693.0
1848 Ai: 32 Gen: 9
1849 Sim Starting
1850 Sim over Total pop = 0 Tick Complete = 70
1851 Fitness = 906.0
1852 Ai: 33 Gen: 9
1853 Sim Starting
1854 Sim over Total pop = 0 Tick Complete = 91
1855 Fitness = 587.1199999999959
1856 Ai: 34 Gen: 9
1857 Sim Starting
1858 Sim over Total pop = 0 Tick Complete = 362
1859 Fitness = 1687.6799999999769
1860 Ai: 35 Gen: 9
1861 Sim Starting
1862 Sim over Total pop = 0 Tick Complete = 184
1863 Fitness = 799.7799999999978
1864 Ai: 36 Gen: 9
1865 Sim Starting
1866 Sim over Total pop = 0 Tick Complete = 520
1867 Fitness = 1416.3999999999558
1868 Ai: 37 Gen: 9
1869 Sim Starting
1870 Sim over Total pop = 0 Tick Complete = 469
1871 Fitness = 1341.3499999999854
1872 Ai: 38 Gen: 9
1873 Sim Starting
1874 Sim over Total pop = 0 Tick Complete = 301
1875 Fitness = 1481.3500000000038
1876 Ai: 39 Gen: 9
1877 Sim Starting
1878 Sim over Total pop = 0 Tick Complete = 272
1879 Fitness = 1061.1799999999873
1880 Ai: 40 Gen: 9
1881 Sim Starting
```

```
1882 Sim over Total pop = 0 Tick Complete = 138
1883 Fitness = 1340.8199999999936
1884 Ai: 41 Gen: 9
1885 Sim Starting
1886 Sim over Total pop = 0 Tick Complete = 385
1887 Fitness = 1445.3399999999738
1888 Ai: 42 Gen: 9
1889 Sim Starting
1890 Sim over Total pop = 0 Tick Complete = 70
1891 Fitness = 627.0
1892 Ai: 43 Gen: 9
1893 Sim Starting
1894 Sim over Total pop = 0 Tick Complete = 1636
1895 Fitness = 2138.19999999999
1896 Ai: 44 Gen: 9
1897 Sim Starting
1898 Sim over Total pop = 0 Tick Complete = 142
1899 Fitness = 858.199999999763
1900 Ai: 45 Gen: 9
1901 Sim Starting
1902 Sim over Total pop = 0 Tick Complete = 137
1903 Fitness = 488.979999999781
1904 Ai: 46 Gen: 9
1905 Sim Starting
1906 Sim over Total pop = 0 Tick Complete = 467
1907 Fitness = 1093.049999999834
1908 Ai: 47 Gen: 9
1909 Sim Starting
1910 Sim over Total pop = 0 Tick Complete = 242
1911 Fitness = 400.599999999968
1912 Ai: 48 Gen: 9
1913 Sim Starting
1914 Sim over Total pop = 0 Tick Complete = 82
1915 Fitness = 649.799999999914
1916 Mean Fitness of Gen 9 is 1060.0344897959121 and
    best fitness 2543.060000000073
1917 Ai: 0 Gen: 10
1918 Sim Starting
1919 Sim over Total pop = 0 Tick Complete = 438
1920 Fitness = 1528.3599999999778
1921 Ai: 1 Gen: 10
1922 Sim Starting
1923 Sim over Total pop = 0 Tick Complete = 274
1924 Fitness = 954.0599999999968
```

```
1925 Ai: 2 Gen: 10
1926 Sim Starting
1927 Sim over Total pop = 0 Tick Complete = 77
1928 Fitness = 907.6499999999996
1929 Ai: 3 Gen: 10
1930 Sim Starting
1931 Sim over Total pop = 0 Tick Complete = 137
1932 Fitness = 891.6599999999992
1933 Ai: 4 Gen: 10
1934 Sim Starting
1935 Sim over Total pop = 0 Tick Complete = 76
1936 Fitness = 594.7199999999871
1937 Ai: 5 Gen: 10
1938 Sim Starting
1939 Sim over Total pop = 0 Tick Complete = 82
1940 Fitness = 777.759999999999
1941 Ai: 6 Gen: 10
1942 Sim Starting
1943 Sim over Total pop = 0 Tick Complete = 727
1944 Fitness = 1911.1499999999278
1945 Ai: 7 Gen: 10
1946 Sim Starting
1947 Sim over Total pop = 0 Tick Complete = 70
1948 Fitness = 906.0
1949 Ai: 8 Gen: 10
1950 Sim Starting
1951 Sim over Total pop = 0 Tick Complete = 70
1952 Fitness = 693.0
1953 Ai: 9 Gen: 10
1954 Sim Starting
1955 Sim over Total pop = 0 Tick Complete = 65
1956 Fitness = 662.4499999999991
1957 Ai: 10 Gen: 10
1958 Sim Starting
1959 Sim over Total pop = 0 Tick Complete = 364
1960 Fitness = 1300.4300000000117
1961 Ai: 11 Gen: 10
1962 Sim Starting
1963 Sim over Total pop = 0 Tick Complete = 61
1964 Fitness = 555.6399999999994
1965 Ai: 12 Gen: 10
1966 Sim Starting
1967 Sim over Total pop = 0 Tick Complete = 65
1968 Fitness = 643.8499999999983
```

```
1969 Ai: 13 Gen: 10
1970 Sim Starting
1971 Sim over Total pop = 0 Tick Complete = 70
1972 Fitness = 693.0
1973 Ai: 14 Gen: 10
1974 Sim Starting
1975 Sim over Total pop = 0 Tick Complete = 130
1976 Fitness = 931.0199999999995
1977 Ai: 15 Gen: 10
1978 Sim Starting
1979 Sim over Total pop = 0 Tick Complete = 324
1980 Fitness = 1205.8599999999996
1981 Ai: 16 Gen: 10
1982 Sim Starting
1983 Sim over Total pop = 0 Tick Complete = 71
1984 Fitness = 628.5899999999999
1985 Ai: 17 Gen: 10
1986 Sim Starting
1987 Sim over Total pop = 0 Tick Complete = 235
1988 Fitness = 583.499999999992
1989 Ai: 18 Gen: 10
1990 Sim Starting
1991 Sim over Total pop = 0 Tick Complete = 124
1992 Fitness = 926.8799999999986
1993 Ai: 19 Gen: 10
1994 Sim Starting
1995 Sim over Total pop = 0 Tick Complete = 157
1996 Fitness = 1253.5099999999898
1997 Ai: 20 Gen: 10
1998 Sim Starting
1999 Sim over Total pop = 0 Tick Complete = 603
2000 Fitness = 1869.949999999457
2001 Ai: 21 Gen: 10
2002 Sim Starting
2003 Sim over Total pop = 0 Tick Complete = 153
2004 Fitness = 583.369999999989
2005 Ai: 22 Gen: 10
2006 Sim Starting
2007 Sim over Total pop = 0 Tick Complete = 71
2008 Fitness = 541.609999999936
2009 Ai: 23 Gen: 10
2010 Sim Starting
2011 Sim over Total pop = 0 Tick Complete = 70
2012 Fitness = 835.0
```

```
2013 Ai: 24 Gen: 10
2014 Sim Starting
2015 Sim over Total pop = 0 Tick Complete = 83
2016 Fitness = 762.8899999999996
2017 Ai: 25 Gen: 10
2018 Sim Starting
2019 Sim over Total pop = 0 Tick Complete = 168
2020 Fitness = 895.7499999999795
2021 Ai: 26 Gen: 10
2022 Sim Starting
2023 Sim over Total pop = 0 Tick Complete = 201
2024 Fitness = 1153.5399999999893
2025 Ai: 27 Gen: 10
2026 Sim Starting
2027 Sim over Total pop = 0 Tick Complete = 1162
2028 Fitness = 1755.0999999999167
2029 Ai: 28 Gen: 10
2030 Sim Starting
2031 Sim over Total pop = 0 Tick Complete = 70
2032 Fitness = 698.0
2033 Ai: 29 Gen: 10
2034 Sim Starting
2035 Sim over Total pop = 0 Tick Complete = 1509
2036 Fitness = 2880.2200000001003
2037 Ai: 30 Gen: 10
2038 Sim Starting
2039 Sim over Total pop = 0 Tick Complete = 251
2040 Fitness = 1143.2499999999827
2041 Ai: 31 Gen: 10
2042 Sim Starting
2043 Sim over Total pop = 0 Tick Complete = 182
2044 Fitness = 1042.6100000000015
2045 Ai: 32 Gen: 10
2046 Sim Starting
2047 Sim over Total pop = 0 Tick Complete = 429
2048 Fitness = 979.5899999999816
2049 Ai: 33 Gen: 10
2050 Sim Starting
2051 Sim over Total pop = 0 Tick Complete = 70
2052 Fitness = 764.0
2053 Ai: 34 Gen: 10
2054 Sim Starting
2055 Sim over Total pop = 0 Tick Complete = 52
2056 Fitness = 51.18999999992494
```

```
2057 Ai: 35 Gen: 10
2058 Sim Starting
2059 Sim over Total pop = 0 Tick Complete = 181
2060 Fitness = 384.8199999999842
2061 Ai: 36 Gen: 10
2062 Sim Starting
2063 Sim over Total pop = 0 Tick Complete = 288
2064 Fitness = 688.9199999999823
2065 Ai: 37 Gen: 10
2066 Sim Starting
2067 Sim over Total pop = 0 Tick Complete = 64
2068 Fitness = 593.0399999999901
2069 Ai: 38 Gen: 10
2070 Sim Starting
2071 Sim over Total pop = 2 Tick Complete = 2001
2072 Fitness = 2950.4899999998515
2073 Ai: 39 Gen: 10
2074 Sim Starting
2075 Sim over Total pop = 0 Tick Complete = 490
2076 Fitness = 1809.0899999999956
2077 Ai: 40 Gen: 10
2078 Sim Starting
2079 Sim over Total pop = 0 Tick Complete = 307
2080 Fitness = 1241.1999999999997
2081 Ai: 41 Gen: 10
2082 Sim Starting
2083 Sim over Total pop = 0 Tick Complete = 191
2084 Fitness = 861.3299999999967
2085 Ai: 42 Gen: 10
2086 Sim Starting
2087 Sim over Total pop = 0 Tick Complete = 70
2088 Fitness = 891.0
2089 Ai: 43 Gen: 10
2090 Sim Starting
2091 Sim over Total pop = 0 Tick Complete = 106
2092 Fitness = 158.9099999999978
2093 Ai: 44 Gen: 10
2094 Sim Starting
2095 Sim over Total pop = 0 Tick Complete = 110
2096 Fitness = 689.3099999999995
2097 Ai: 45 Gen: 10
2098 Sim Starting
2099 Sim over Total pop = 0 Tick Complete = 245
2100 Fitness = 1178.2899999999945
```

```
2101 Ai: 46 Gen: 10
2102 Sim Starting
2103 Sim over Total pop = 0 Tick Complete = 1301
2104 Fitness = 2405.740000000064
2105 Ai: 47 Gen: 10
2106 Sim Starting
2107 Sim over Total pop = 0 Tick Complete = 263
2108 Fitness = 1194.239999999998
2109 Ai: 48 Gen: 10
2110 Sim Starting
2111 Sim over Total pop = 0 Tick Complete = 451
2112 Fitness = 1618.2199999999677
2113 Ai: 49 Gen: 10
2114 Sim Starting
2115 Sim over Total pop = 2 Tick Complete = 2001
2116 Fitness = 3112.589999999853
2117 Ai: 50 Gen: 10
2118 Sim Starting
2119 Sim over Total pop = 0 Tick Complete = 379
2120 Fitness = 799.7399999999948
2121 Ai: 51 Gen: 10
2122 Sim Starting
2123 Sim over Total pop = 0 Tick Complete = 119
2124 Fitness = 159.25000000000006
2125 Mean Fitness of Gen 10 is 1062.3334615384501 and
best fitness 3112.589999999853
2126 Ai: 0 Gen: 11
2127 Sim Starting
2128 Sim over Total pop = 0 Tick Complete = 73
2129 Fitness = 630.3899999999996
2130 Ai: 1 Gen: 11
2131 Sim Starting
2132 Sim over Total pop = 0 Tick Complete = 184
2133 Fitness = 600.7599999999943
2134 Ai: 2 Gen: 11
2135 Sim Starting
2136 Sim over Total pop = 0 Tick Complete = 472
2137 Fitness = 756.8599999999933
2138 Ai: 3 Gen: 11
2139 Sim Starting
2140 Sim over Total pop = 0 Tick Complete = 83
2141 Fitness = 775.3099999999995
2142 Ai: 4 Gen: 11
2143 Sim Starting
```

```
2144 Sim over Total pop = 0 Tick Complete = 70
2145 Fitness = 1094.0
2146 Ai: 5 Gen: 11
2147 Sim Starting
2148 Sim over Total pop = 0 Tick Complete = 155
2149 Fitness = 845.2499999999889
2150 Ai: 6 Gen: 11
2151 Sim Starting
2152 Sim over Total pop = 0 Tick Complete = 70
2153 Fitness = 693.0
2154 Ai: 7 Gen: 11
2155 Sim Starting
2156 Sim over Total pop = 0 Tick Complete = 187
2157 Fitness = 1038.0599999999934
2158 Ai: 8 Gen: 11
2159 Sim Starting
2160 Sim over Total pop = 0 Tick Complete = 888
2161 Fitness = 1613.9500000000069
2162 Ai: 9 Gen: 11
2163 Sim Starting
2164 Sim over Total pop = 0 Tick Complete = 75
2165 Fitness = 1026.32
2166 Ai: 10 Gen: 11
2167 Sim Starting
2168 Sim over Total pop = 0 Tick Complete = 70
2169 Fitness = 830.0
2170 Ai: 11 Gen: 11
2171 Sim Starting
2172 Sim over Total pop = 0 Tick Complete = 582
2173 Fitness = 1505.6199999999963
2174 Ai: 12 Gen: 11
2175 Sim Starting
2176 Sim over Total pop = 0 Tick Complete = 70
2177 Fitness = 911.0
2178 Ai: 13 Gen: 11
2179 Sim Starting
2180 Sim over Total pop = 0 Tick Complete = 529
2181 Fitness = 1381.929999999989
2182 Ai: 14 Gen: 11
2183 Sim Starting
2184 Sim over Total pop = 0 Tick Complete = 204
2185 Fitness = 983.2299999999913
2186 Ai: 15 Gen: 11
2187 Sim Starting
```

```
2188 Sim over Total pop = 0 Tick Complete = 289
2189 Fitness = 1197.93000000000062
2190 Ai: 16 Gen: 11
2191 Sim Starting
2192 Sim over Total pop = 0 Tick Complete = 224
2193 Fitness = 1023.8999999999979
2194 Ai: 17 Gen: 11
2195 Sim Starting
2196 Sim over Total pop = 0 Tick Complete = 70
2197 Fitness = 972.0
2198 Ai: 18 Gen: 11
2199 Sim Starting
2200 Sim over Total pop = 0 Tick Complete = 101
2201 Fitness = 767.4399999999981
2202 Ai: 19 Gen: 11
2203 Sim Starting
2204 Sim over Total pop = 0 Tick Complete = 209
2205 Fitness = 942.0600000000023
2206 Ai: 20 Gen: 11
2207 Sim Starting
2208 Sim over Total pop = 0 Tick Complete = 227
2209 Fitness = 1204.0800000000006
2210 Ai: 21 Gen: 11
2211 Sim Starting
2212 Sim over Total pop = 0 Tick Complete = 70
2213 Fitness = 774.0
2214 Ai: 22 Gen: 11
2215 Sim Starting
2216 Sim over Total pop = 0 Tick Complete = 70
2217 Fitness = 764.0
2218 Ai: 23 Gen: 11
2219 Sim Starting
2220 Sim over Total pop = 0 Tick Complete = 70
2221 Fitness = 906.0
2222 Ai: 24 Gen: 11
2223 Sim Starting
2224 Sim over Total pop = 0 Tick Complete = 236
2225 Fitness = 1116.2699999999854
2226 Ai: 25 Gen: 11
2227 Sim Starting
2228 Sim over Total pop = 0 Tick Complete = 607
2229 Fitness = 1394.0200000000021
2230 Ai: 26 Gen: 11
2231 Sim Starting
```

```
2232 Sim over Total pop = 0 Tick Complete = 153
2233 Fitness = 602.7599999999918
2234 Ai: 27 Gen: 11
2235 Sim Starting
2236 Sim over Total pop = 0 Tick Complete = 942
2237 Fitness = 1249.609999999971
2238 Ai: 28 Gen: 11
2239 Sim Starting
2240 Sim over Total pop = 0 Tick Complete = 816
2241 Fitness = 2135.849999998726
2242 Ai: 29 Gen: 11
2243 Sim Starting
2244 Sim over Total pop = 0 Tick Complete = 462
2245 Fitness = 1318.819999999597
2246 Ai: 30 Gen: 11
2247 Sim Starting
2248 Sim over Total pop = 0 Tick Complete = 582
2249 Fitness = 1076.209999999482
2250 Ai: 31 Gen: 11
2251 Sim Starting
2252 Sim over Total pop = 0 Tick Complete = 89
2253 Fitness = 593.089999999892
2254 Ai: 32 Gen: 11
2255 Sim Starting
2256 Sim over Total pop = 0 Tick Complete = 298
2257 Fitness = 553.329999999965
2258 Ai: 33 Gen: 11
2259 Sim Starting
2260 Sim over Total pop = 0 Tick Complete = 269
2261 Fitness = 836.919999999997
2262 Ai: 34 Gen: 11
2263 Sim Starting
2264 Sim over Total pop = 0 Tick Complete = 916
2265 Fitness = 1651.369999999976
2266 Ai: 35 Gen: 11
2267 Sim Starting
2268 Sim over Total pop = 0 Tick Complete = 1250
2269 Fitness = 2421.489999998897
2270 Ai: 36 Gen: 11
2271 Sim Starting
2272 Sim over Total pop = 0 Tick Complete = 147
2273 Fitness = 573.799999999995
2274 Ai: 37 Gen: 11
2275 Sim Starting
```

```
2276 Sim over Total pop = 0 Tick Complete = 176
2277 Fitness = 858.8399999999976
2278 Ai: 38 Gen: 11
2279 Sim Starting
2280 Sim over Total pop = 0 Tick Complete = 958
2281 Fitness = 2066.9199999999146
2282 Ai: 39 Gen: 11
2283 Sim Starting
2284 Sim over Total pop = 0 Tick Complete = 636
2285 Fitness = 2709.039999999941
2286 Ai: 40 Gen: 11
2287 Sim Starting
2288 Sim over Total pop = 0 Tick Complete = 101
2289 Fitness = 680.9599999999797
2290 Ai: 41 Gen: 11
2291 Sim Starting
2292 Sim over Total pop = 0 Tick Complete = 189
2293 Fitness = 1033.8399999999926
2294 Ai: 42 Gen: 11
2295 Sim Starting
2296 Sim over Total pop = 0 Tick Complete = 472
2297 Fitness = 1200.4399999999814
2298 Ai: 43 Gen: 11
2299 Sim Starting
2300 Sim over Total pop = 5 Tick Complete = 2001
2301 Fitness = 2552.179999999972
2302 Ai: 44 Gen: 11
2303 Sim Starting
2304 Sim over Total pop = 0 Tick Complete = 900
2305 Fitness = 1838.5000000000534
2306 Ai: 45 Gen: 11
2307 Sim Starting
2308 Sim over Total pop = 0 Tick Complete = 65
2309 Fitness = 196.0199999999972
2310 Ai: 46 Gen: 11
2311 Sim Starting
2312 Sim over Total pop = 0 Tick Complete = 466
2313 Fitness = 1016.3299999999971
2314 Ai: 47 Gen: 11
2315 Sim Starting
2316 Sim over Total pop = 0 Tick Complete = 102
2317 Fitness = 298.6299999999915
2318 Ai: 48 Gen: 11
2319 Sim Starting
```

```
2320 Sim over Total pop = 0 Tick Complete = 500
2321 Fitness = 1743.93000000000392
2322 Ai: 49 Gen: 11
2323 Sim Starting
2324 Sim over Total pop = 0 Tick Complete = 70
2325 Fitness = 693.0
2326 Ai: 50 Gen: 11
2327 Sim Starting
2328 Sim over Total pop = 0 Tick Complete = 181
2329 Fitness = 1069.9599999999941
2330 Mean Fitness of Gen 11 is 1112.1415686274393 and
best fitness 2709.039999999941
2331 Ai: 0 Gen: 12
2332 Sim Starting
2333 Sim over Total pop = 0 Tick Complete = 70
2334 Fitness = 825.0
2335 Ai: 1 Gen: 12
2336 Sim Starting
2337 Sim over Total pop = 0 Tick Complete = 79
2338 Fitness = 717.6099999999922
2339 Ai: 2 Gen: 12
2340 Sim Starting
2341 Sim over Total pop = 0 Tick Complete = 173
2342 Fitness = 907.3199999999962
2343 Ai: 3 Gen: 12
2344 Sim Starting
2345 Sim over Total pop = 0 Tick Complete = 70
2346 Fitness = 693.0
2347 Ai: 4 Gen: 12
2348 Sim Starting
2349 Sim over Total pop = 0 Tick Complete = 84
2350 Fitness = 661.2599999999929
2351 Ai: 5 Gen: 12
2352 Sim Starting
2353 Sim over Total pop = 0 Tick Complete = 70
2354 Fitness = 759.0
2355 Ai: 6 Gen: 12
2356 Sim Starting
2357 Sim over Total pop = 0 Tick Complete = 90
2358 Fitness = 1004.0599999999973
2359 Ai: 7 Gen: 12
2360 Sim Starting
2361 Sim over Total pop = 0 Tick Complete = 63
2362 Fitness = 545.5599999999964
```

```
2363 Ai: 8 Gen: 12
2364 Sim Starting
2365 Sim over Total pop = 0 Tick Complete = 70
2366 Fitness = 896.06
2367 Ai: 9 Gen: 12
2368 Sim Starting
2369 Sim over Total pop = 0 Tick Complete = 73
2370 Fitness = 806.4299999999957
2371 Ai: 10 Gen: 12
2372 Sim Starting
2373 Sim over Total pop = 0 Tick Complete = 250
2374 Fitness = 1290.7599999999927
2375 Ai: 11 Gen: 12
2376 Sim Starting
2377 Sim over Total pop = 0 Tick Complete = 300
2378 Fitness = 1153.1600000000017
2379 Ai: 12 Gen: 12
2380 Sim Starting
2381 Sim over Total pop = 0 Tick Complete = 170
2382 Fitness = 900.0400000000018
2383 Ai: 13 Gen: 12
2384 Sim Starting
2385 Sim over Total pop = 0 Tick Complete = 886
2386 Fitness = 2077.8699999999185
2387 Ai: 14 Gen: 12
2388 Sim Starting
2389 Sim over Total pop = 0 Tick Complete = 159
2390 Fitness = 789.7999999999937
2391 Ai: 15 Gen: 12
2392 Sim Starting
2393 Sim over Total pop = 0 Tick Complete = 1840
2394 Fitness = 3040.5100000000602
2395 Ai: 16 Gen: 12
2396 Sim Starting
2397 Sim over Total pop = 0 Tick Complete = 71
2398 Fitness = 694.7299999999994
2399 Ai: 17 Gen: 12
2400 Sim Starting
2401 Sim over Total pop = 0 Tick Complete = 110
2402 Fitness = 996.3399999999993
2403 Ai: 18 Gen: 12
2404 Sim Starting
2405 Sim over Total pop = 0 Tick Complete = 158
2406 Fitness = 311.75999999998993
```

```
2407 Ai: 19 Gen: 12
2408 Sim Starting
2409 Sim over Total pop = 0 Tick Complete = 212
2410 Fitness = 264.75999999999067
2411 Ai: 20 Gen: 12
2412 Sim Starting
2413 Sim over Total pop = 0 Tick Complete = 214
2414 Fitness = 764.0399999999887
2415 Ai: 21 Gen: 12
2416 Sim Starting
2417 Sim over Total pop = 0 Tick Complete = 70
2418 Fitness = 759.0
2419 Ai: 22 Gen: 12
2420 Sim Starting
2421 Sim over Total pop = 0 Tick Complete = 162
2422 Fitness = 988.6399999999932
2423 Ai: 23 Gen: 12
2424 Sim Starting
2425 Sim over Total pop = 0 Tick Complete = 114
2426 Fitness = 188.4699999999965
2427 Ai: 24 Gen: 12
2428 Sim Starting
2429 Sim over Total pop = 0 Tick Complete = 173
2430 Fitness = 940.3399999999934
2431 Ai: 25 Gen: 12
2432 Sim Starting
2433 Sim over Total pop = 0 Tick Complete = 86
2434 Fitness = 486.90999999999474
2435 Ai: 26 Gen: 12
2436 Sim Starting
2437 Sim over Total pop = 0 Tick Complete = 160
2438 Fitness = 739.0199999999954
2439 Ai: 27 Gen: 12
2440 Sim Starting
2441 Sim over Total pop = 0 Tick Complete = 71
2442 Fitness = 895.0999999999995
2443 Ai: 28 Gen: 12
2444 Sim Starting
2445 Sim over Total pop = 0 Tick Complete = 128
2446 Fitness = 649.8999999999976
2447 Ai: 29 Gen: 12
2448 Sim Starting
2449 Sim over Total pop = 0 Tick Complete = 1164
2450 Fitness = 2670.2900000000063
```

```
2451 Ai: 30 Gen: 12
2452 Sim Starting
2453 Sim over Total pop = 0 Tick Complete = 1429
2454 Fitness = 2613.6200000000645
2455 Ai: 31 Gen: 12
2456 Sim Starting
2457 Sim over Total pop = 0 Tick Complete = 307
2458 Fitness = 661.3999999999933
2459 Ai: 32 Gen: 12
2460 Sim Starting
2461 Sim over Total pop = 0 Tick Complete = 70
2462 Fitness = 896.0
2463 Ai: 33 Gen: 12
2464 Sim Starting
2465 Sim over Total pop = 0 Tick Complete = 1037
2466 Fitness = 1252.5400000000127
2467 Ai: 34 Gen: 12
2468 Sim Starting
2469 Sim over Total pop = 0 Tick Complete = 186
2470 Fitness = 833.0599999999745
2471 Ai: 35 Gen: 12
2472 Sim Starting
2473 Sim over Total pop = 0 Tick Complete = 356
2474 Fitness = 720.5999999999804
2475 Ai: 36 Gen: 12
2476 Sim Starting
2477 Sim over Total pop = 0 Tick Complete = 213
2478 Fitness = 827.6999999999695
2479 Ai: 37 Gen: 12
2480 Sim Starting
2481 Sim over Total pop = 0 Tick Complete = 336
2482 Fitness = 816.7099999999631
2483 Ai: 38 Gen: 12
2484 Sim Starting
2485 Sim over Total pop = 3 Tick Complete = 2001
2486 Fitness = 3004.7400000001035
2487 Ai: 39 Gen: 12
2488 Sim Starting
2489 Sim over Total pop = 0 Tick Complete = 70
2490 Fitness = 698.0
2491 Ai: 40 Gen: 12
2492 Sim Starting
2493 Sim over Total pop = 0 Tick Complete = 58
2494 Fitness = 393.4299999999987
```

```
2495 Ai: 41 Gen: 12
2496 Sim Starting
2497 Sim over Total pop = 0 Tick Complete = 132
2498 Fitness = 714.3899999999779
2499 Ai: 42 Gen: 12
2500 Sim Starting
2501 Sim over Total pop = 0 Tick Complete = 67
2502 Fitness = 185.9999999999892
2503 Ai: 43 Gen: 12
2504 Sim Starting
2505 Sim over Total pop = 0 Tick Complete = 284
2506 Fitness = 1179.0299999999977
2507 Ai: 44 Gen: 12
2508 Sim Starting
2509 Sim over Total pop = 0 Tick Complete = 444
2510 Fitness = 1269.9600000000019
2511 Ai: 45 Gen: 12
2512 Sim Starting
2513 Sim over Total pop = 0 Tick Complete = 331
2514 Fitness = 1286.7699999999709
2515 Ai: 46 Gen: 12
2516 Sim Starting
2517 Sim over Total pop = 0 Tick Complete = 71
2518 Fitness = 476.5899999999898
2519 Ai: 47 Gen: 12
2520 Sim Starting
2521 Sim over Total pop = 0 Tick Complete = 1225
2522 Fitness = 2361.400000000044
2523 Ai: 48 Gen: 12
2524 Sim Starting
2525 Sim over Total pop = 0 Tick Complete = 70
2526 Fitness = 825.0
2527 Ai: 49 Gen: 12
2528 Sim Starting
2529 Sim over Total pop = 9 Tick Complete = 2001
2530 Fitness = 2595.9599999999373
2531 Ai: 50 Gen: 12
2532 Sim Starting
2533 Sim over Total pop = 0 Tick Complete = 328
2534 Fitness = 985.5599999999631
2535 Mean Fitness of Gen 12 is 1039.5137254901927 and
best fitness 3040.5100000000602
2536 Ai: 0 Gen: 13
2537 Sim Starting
```

```
2538 Sim over Total pop = 0 Tick Complete = 70
2539 Fitness = 1023.0
2540 Ai: 1 Gen: 13
2541 Sim Starting
2542 Sim over Total pop = 0 Tick Complete = 70
2543 Fitness = 967.0
2544 Ai: 2 Gen: 13
2545 Sim Starting
2546 Sim over Total pop = 0 Tick Complete = 341
2547 Fitness = 1180.919999999976
2548 Ai: 3 Gen: 13
2549 Sim Starting
2550 Sim over Total pop = 0 Tick Complete = 133
2551 Fitness = 751.6199999999691
2552 Ai: 4 Gen: 13
2553 Sim Starting
2554 Sim over Total pop = 0 Tick Complete = 63
2555 Fitness = 572.1699999999923
2556 Ai: 5 Gen: 13
2557 Sim Starting
2558 Sim over Total pop = 0 Tick Complete = 85
2559 Fitness = 911.2
2560 Ai: 6 Gen: 13
2561 Sim Starting
2562 Sim over Total pop = 0 Tick Complete = 176
2563 Fitness = 1078.569999999998
2564 Ai: 7 Gen: 13
2565 Sim Starting
2566 Sim over Total pop = 0 Tick Complete = 299
2567 Fitness = 537.1799999999827
2568 Ai: 8 Gen: 13
2569 Sim Starting
2570 Sim over Total pop = 0 Tick Complete = 510
2571 Fitness = 1839.499999999968
2572 Ai: 9 Gen: 13
2573 Sim Starting
2574 Sim over Total pop = 0 Tick Complete = 372
2575 Fitness = 1193.600000000047
2576 Ai: 10 Gen: 13
2577 Sim Starting
2578 Sim over Total pop = 0 Tick Complete = 426
2579 Fitness = 1311.9799999999932
2580 Ai: 11 Gen: 13
2581 Sim Starting
```

```
2582 Sim over Total pop = 0 Tick Complete = 435
2583 Fitness = 1148.7199999999848
2584 Ai: 12 Gen: 13
2585 Sim Starting
2586 Sim over Total pop = 0 Tick Complete = 209
2587 Fitness = 569.6199999999926
2588 Ai: 13 Gen: 13
2589 Sim Starting
2590 Sim over Total pop = 0 Tick Complete = 922
2591 Fitness = 1683.5999999999897
2592 Ai: 14 Gen: 13
2593 Sim Starting
2594 Sim over Total pop = 0 Tick Complete = 309
2595 Fitness = 1148.78000000001
2596 Ai: 15 Gen: 13
2597 Sim Starting
2598 Sim over Total pop = 0 Tick Complete = 109
2599 Fitness = 743.4699999999972
2600 Ai: 16 Gen: 13
2601 Sim Starting
2602 Sim over Total pop = 0 Tick Complete = 169
2603 Fitness = 930.0499999999971
2604 Ai: 17 Gen: 13
2605 Sim Starting
2606 Sim over Total pop = 0 Tick Complete = 381
2607 Fitness = 591.1599999999958
2608 Ai: 18 Gen: 13
2609 Sim Starting
2610 Sim over Total pop = 0 Tick Complete = 167
2611 Fitness = 858.8399999999932
2612 Ai: 19 Gen: 13
2613 Sim Starting
2614 Sim over Total pop = 0 Tick Complete = 68
2615 Fitness = 705.3799999999924
2616 Ai: 20 Gen: 13
2617 Sim Starting
2618 Sim over Total pop = 0 Tick Complete = 465
2619 Fitness = 1209.5100000000008
2620 Ai: 21 Gen: 13
2621 Sim Starting
2622 Sim over Total pop = 0 Tick Complete = 279
2623 Fitness = 1632.67000000000137
2624 Ai: 22 Gen: 13
2625 Sim Starting
```

```
2626 Sim over Total pop = 0 Tick Complete = 102
2627 Fitness = 819.4399999999986
2628 Ai: 23 Gen: 13
2629 Sim Starting
2630 Sim over Total pop = 0 Tick Complete = 290
2631 Fitness = 802.3699999999843
2632 Ai: 24 Gen: 13
2633 Sim Starting
2634 Sim over Total pop = 0 Tick Complete = 546
2635 Fitness = 806.31
2636 Ai: 25 Gen: 13
2637 Sim Starting
2638 Sim over Total pop = 0 Tick Complete = 462
2639 Fitness = 1126.7799999999827
2640 Ai: 26 Gen: 13
2641 Sim Starting
2642 Sim over Total pop = 0 Tick Complete = 106
2643 Fitness = 216.41999999999186
2644 Ai: 27 Gen: 13
2645 Sim Starting
2646 Sim over Total pop = 0 Tick Complete = 89
2647 Fitness = 413.1599999999821
2648 Ai: 28 Gen: 13
2649 Sim Starting
2650 Sim over Total pop = 0 Tick Complete = 106
2651 Fitness = 384.5799999999836
2652 Ai: 29 Gen: 13
2653 Sim Starting
2654 Sim over Total pop = 0 Tick Complete = 176
2655 Fitness = 1043.2299999999861
2656 Ai: 30 Gen: 13
2657 Sim Starting
2658 Sim over Total pop = 0 Tick Complete = 671
2659 Fitness = 1722.8399999999633
2660 Ai: 31 Gen: 13
2661 Sim Starting
2662 Sim over Total pop = 0 Tick Complete = 1277
2663 Fitness = 1913.8900000000194
2664 Ai: 32 Gen: 13
2665 Sim Starting
2666 Sim over Total pop = 0 Tick Complete = 140
2667 Fitness = 354.36999999997613
2668 Ai: 33 Gen: 13
2669 Sim Starting
```

```
2670 Sim over Total pop = 0 Tick Complete = 601
2671 Fitness = 1377.0799999999713
2672 Ai: 34 Gen: 13
2673 Sim Starting
2674 Sim over Total pop = 3 Tick Complete = 2001
2675 Fitness = 3251.0800000001245
2676 Ai: 35 Gen: 13
2677 Sim Starting
2678 Sim over Total pop = 0 Tick Complete = 313
2679 Fitness = 1181.5599999999674
2680 Ai: 36 Gen: 13
2681 Sim Starting
2682 Sim over Total pop = 0 Tick Complete = 725
2683 Fitness = 1136.5499999999815
2684 Ai: 37 Gen: 13
2685 Sim Starting
2686 Sim over Total pop = 0 Tick Complete = 342
2687 Fitness = 1322.6199999999999
2688 Ai: 38 Gen: 13
2689 Sim Starting
2690 Sim over Total pop = 0 Tick Complete = 152
2691 Fitness = 893.6699999999834
2692 Ai: 39 Gen: 13
2693 Sim Starting
2694 Sim over Total pop = 0 Tick Complete = 997
2695 Fitness = 1807.359999999873
2696 Ai: 40 Gen: 13
2697 Sim Starting
2698 Sim over Total pop = 0 Tick Complete = 132
2699 Fitness = 811.1899999999848
2700 Ai: 41 Gen: 13
2701 Sim Starting
2702 Sim over Total pop = 0 Tick Complete = 98
2703 Fitness = 166.9099999999207
2704 Ai: 42 Gen: 13
2705 Sim Starting
2706 Sim over Total pop = 0 Tick Complete = 663
2707 Fitness = 2050.460000000033
2708 Ai: 43 Gen: 13
2709 Sim Starting
2710 Sim over Total pop = 0 Tick Complete = 61
2711 Fitness = 518.0399999999908
2712 Ai: 44 Gen: 13
2713 Sim Starting
```

```
2714 Sim over Total pop = 0 Tick Complete = 417
2715 Fitness = 1330.8299999999895
2716 Ai: 45 Gen: 13
2717 Sim Starting
2718 Sim over Total pop = 0 Tick Complete = 178
2719 Fitness = 606.6199999999856
2720 Ai: 46 Gen: 13
2721 Sim Starting
2722 Sim over Total pop = 0 Tick Complete = 348
2723 Fitness = 1211.0899999999874
2724 Ai: 47 Gen: 13
2725 Sim Starting
2726 Sim over Total pop = 0 Tick Complete = 217
2727 Fitness = 836.9799999999959
2728 Ai: 48 Gen: 13
2729 Sim Starting
2730 Sim over Total pop = 0 Tick Complete = 214
2731 Fitness = 1333.6299999999992
2732 Mean Fitness of Gen 13 is 1061.7877551020324 and
best fitness 3251.0800000001245
2733 Ai: 0 Gen: 14
2734 Sim Starting
2735 Sim over Total pop = 0 Tick Complete = 128
2736 Fitness = 824.9799999999955
2737 Ai: 1 Gen: 14
2738 Sim Starting
2739 Sim over Total pop = 0 Tick Complete = 632
2740 Fitness = 1626.6600000000276
2741 Ai: 2 Gen: 14
2742 Sim Starting
2743 Sim over Total pop = 0 Tick Complete = 432
2744 Fitness = 1167.829999999995
2745 Ai: 3 Gen: 14
2746 Sim Starting
2747 Sim over Total pop = 0 Tick Complete = 70
2748 Fitness = 774.0
2749 Ai: 4 Gen: 14
2750 Sim Starting
2751 Sim over Total pop = 0 Tick Complete = 70
2752 Fitness = 759.0
2753 Ai: 5 Gen: 14
2754 Sim Starting
2755 Sim over Total pop = 0 Tick Complete = 70
2756 Fitness = 896.0
```

```
2757 Ai: 6 Gen: 14
2758 Sim Starting
2759 Sim over Total pop = 0 Tick Complete = 476
2760 Fitness = 1359.77
2761 Ai: 7 Gen: 14
2762 Sim Starting
2763 Sim over Total pop = 0 Tick Complete = 70
2764 Fitness = 689.8799999999998
2765 Ai: 8 Gen: 14
2766 Sim Starting
2767 Sim over Total pop = 0 Tick Complete = 70
2768 Fitness = 830.0
2769 Ai: 9 Gen: 14
2770 Sim Starting
2771 Sim over Total pop = 0 Tick Complete = 154
2772 Fitness = 870.7500000000059
2773 Ai: 10 Gen: 14
2774 Sim Starting
2775 Sim over Total pop = 0 Tick Complete = 199
2776 Fitness = 1293.5299999999877
2777 Ai: 11 Gen: 14
2778 Sim Starting
2779 Sim over Total pop = 0 Tick Complete = 63
2780 Fitness = 616.7299999999963
2781 Ai: 12 Gen: 14
2782 Sim Starting
2783 Sim over Total pop = 0 Tick Complete = 145
2784 Fitness = 992.6699999999942
2785 Ai: 13 Gen: 14
2786 Sim Starting
2787 Sim over Total pop = 0 Tick Complete = 173
2788 Fitness = 921.6499999999888
2789 Ai: 14 Gen: 14
2790 Sim Starting
2791 Sim over Total pop = 0 Tick Complete = 222
2792 Fitness = 994.0299999999854
2793 Ai: 15 Gen: 14
2794 Sim Starting
2795 Sim over Total pop = 0 Tick Complete = 178
2796 Fitness = 965.3899999999774
2797 Ai: 16 Gen: 14
2798 Sim Starting
2799 Sim over Total pop = 0 Tick Complete = 109
2800 Fitness = 579.7699999999859
```

```
2801 Ai: 17 Gen: 14
2802 Sim Starting
2803 Sim over Total pop = 0 Tick Complete = 75
2804 Fitness = 583.3699999999885
2805 Ai: 18 Gen: 14
2806 Sim Starting
2807 Sim over Total pop = 0 Tick Complete = 238
2808 Fitness = 1052.799999999962
2809 Ai: 19 Gen: 14
2810 Sim Starting
2811 Sim over Total pop = 0 Tick Complete = 127
2812 Fitness = 814.8500000000003
2813 Ai: 20 Gen: 14
2814 Sim Starting
2815 Sim over Total pop = 0 Tick Complete = 207
2816 Fitness = 1026.3399999999922
2817 Ai: 21 Gen: 14
2818 Sim Starting
2819 Sim over Total pop = 0 Tick Complete = 143
2820 Fitness = 699.5199999999794
2821 Ai: 22 Gen: 14
2822 Sim Starting
2823 Sim over Total pop = 0 Tick Complete = 154
2824 Fitness = 1144.029999999993
2825 Ai: 23 Gen: 14
2826 Sim Starting
2827 Sim over Total pop = 0 Tick Complete = 154
2828 Fitness = 999.5699999999949
2829 Ai: 24 Gen: 14
2830 Sim Starting
2831 Sim over Total pop = 0 Tick Complete = 259
2832 Fitness = 1232.9499999999884
2833 Ai: 25 Gen: 14
2834 Sim Starting
2835 Sim over Total pop = 0 Tick Complete = 198
2836 Fitness = 1110.839999999998
2837 Ai: 26 Gen: 14
2838 Sim Starting
2839 Sim over Total pop = 0 Tick Complete = 413
2840 Fitness = 923.83000000001
2841 Ai: 27 Gen: 14
2842 Sim Starting
2843 Sim over Total pop = 0 Tick Complete = 118
2844 Fitness = 911.9099999999854
```

```
2845 Ai: 28 Gen: 14
2846 Sim Starting
2847 Sim over Total pop = 0 Tick Complete = 70
2848 Fitness = 627.0
2849 Ai: 29 Gen: 14
2850 Sim Starting
2851 Sim over Total pop = 0 Tick Complete = 163
2852 Fitness = 1094.3100000000009
2853 Ai: 30 Gen: 14
2854 Sim Starting
2855 Sim over Total pop = 0 Tick Complete = 292
2856 Fitness = 1132.5499999999925
2857 Ai: 31 Gen: 14
2858 Sim Starting
2859 Sim over Total pop = 0 Tick Complete = 122
2860 Fitness = 980.9200000000011
2861 Ai: 32 Gen: 14
2862 Sim Starting
2863 Sim over Total pop = 0 Tick Complete = 70
2864 Fitness = 766.6299999999976
2865 Ai: 33 Gen: 14
2866 Sim Starting
2867 Sim over Total pop = 0 Tick Complete = 70
2868 Fitness = 759.0
2869 Ai: 34 Gen: 14
2870 Sim Starting
2871 Sim over Total pop = 0 Tick Complete = 61
2872 Fitness = 257.7999999999985
2873 Ai: 35 Gen: 14
2874 Sim Starting
2875 Sim over Total pop = 0 Tick Complete = 345
2876 Fitness = 1119.1599999999917
2877 Ai: 36 Gen: 14
2878 Sim Starting
2879 Sim over Total pop = 0 Tick Complete = 159
2880 Fitness = 1197.9999999999868
2881 Ai: 37 Gen: 14
2882 Sim Starting
2883 Sim over Total pop = 0 Tick Complete = 130
2884 Fitness = 1020.7299999999909
2885 Ai: 38 Gen: 14
2886 Sim Starting
2887 Sim over Total pop = 0 Tick Complete = 340
2888 Fitness = 1162.86999999999894
```

```
2889 Ai: 39 Gen: 14
2890 Sim Starting
2891 Sim over Total pop = 0 Tick Complete = 317
2892 Fitness = 1217.1399999999776
2893 Ai: 40 Gen: 14
2894 Sim Starting
2895 Sim over Total pop = 0 Tick Complete = 133
2896 Fitness = 817.8499999999701
2897 Ai: 41 Gen: 14
2898 Sim Starting
2899 Sim over Total pop = 0 Tick Complete = 241
2900 Fitness = 802.1499999999945
2901 Ai: 42 Gen: 14
2902 Sim Starting
2903 Sim over Total pop = 0 Tick Complete = 303
2904 Fitness = 1280.899999999988
2905 Ai: 43 Gen: 14
2906 Sim Starting
2907 Sim over Total pop = 0 Tick Complete = 1435
2908 Fitness = 2732.4700000000184
2909 Ai: 44 Gen: 14
2910 Sim Starting
2911 Sim over Total pop = 0 Tick Complete = 66
2912 Fitness = 266.10999999999666
2913 Ai: 45 Gen: 14
2914 Sim Starting
2915 Sim over Total pop = 0 Tick Complete = 90
2916 Fitness = 371.3399999999955
2917 Ai: 46 Gen: 14
2918 Sim Starting
2919 Sim over Total pop = 0 Tick Complete = 445
2920 Fitness = 1288.7399999999807
2921 Ai: 47 Gen: 14
2922 Sim Starting
2923 Sim over Total pop = 3 Tick Complete = 2001
2924 Fitness = 2445.7100000000264
2925 Ai: 48 Gen: 14
2926 Sim Starting
2927 Sim over Total pop = 0 Tick Complete = 82
2928 Fitness = 332.27999999999594
2929 Ai: 49 Gen: 14
2930 Sim Starting
2931 Sim over Total pop = 0 Tick Complete = 856
2932 Fitness = 1648.1899999999955
```

```
2933 Ai: 50 Gen: 14
2934 Sim Starting
2935 Sim over Total pop = 0 Tick Complete = 1100
2936 Fitness = 1481.4799999999732
2937 Mean Fitness of Gen 14 is 1009.1368627450921 and
    best fitness 2732.4700000000184
2938 Ai: 0 Gen: 15
2939 Sim Starting
2940 Sim over Total pop = 0 Tick Complete = 70
2941 Fitness = 764.0
2942 Ai: 1 Gen: 15
2943 Sim Starting
2944 Sim over Total pop = 0 Tick Complete = 70
2945 Fitness = 830.0
2946 Ai: 2 Gen: 15
2947 Sim Starting
2948 Sim over Total pop = 0 Tick Complete = 70
2949 Fitness = 830.0
2950 Ai: 3 Gen: 15
2951 Sim Starting
2952 Sim over Total pop = 0 Tick Complete = 70
2953 Fitness = 896.0
2954 Ai: 4 Gen: 15
2955 Sim Starting
2956 Sim over Total pop = 0 Tick Complete = 292
2957 Fitness = 477.099999999961
2958 Ai: 5 Gen: 15
2959 Sim Starting
2960 Sim over Total pop = 0 Tick Complete = 206
2961 Fitness = 963.219999999966
2962 Ai: 6 Gen: 15
2963 Sim Starting
2964 Sim over Total pop = 2 Tick Complete = 2001
2965 Fitness = 2866.369999998844
2966 Ai: 7 Gen: 15
2967 Sim Starting
2968 Sim over Total pop = 0 Tick Complete = 234
2969 Fitness = 1120.509999999932
2970 Ai: 8 Gen: 15
2971 Sim Starting
2972 Sim over Total pop = 0 Tick Complete = 1110
2973 Fitness = 2377.349999999996
2974 Ai: 9 Gen: 15
2975 Sim Starting
```

```
2976 Sim over Total pop = 0 Tick Complete = 269
2977 Fitness = 961.98999999999909
2978 Ai: 10 Gen: 15
2979 Sim Starting
2980 Sim over Total pop = 0 Tick Complete = 121
2981 Fitness = 1050.189999999998
2982 Ai: 11 Gen: 15
2983 Sim Starting
2984 Sim over Total pop = 0 Tick Complete = 282
2985 Fitness = 1009.319999999986
2986 Ai: 12 Gen: 15
2987 Sim Starting
2988 Sim over Total pop = 0 Tick Complete = 239
2989 Fitness = 1143.9299999999962
2990 Ai: 13 Gen: 15
2991 Sim Starting
2992 Sim over Total pop = 0 Tick Complete = 1736
2993 Fitness = 3041.8799999999856
2994 Ai: 14 Gen: 15
2995 Sim Starting
2996 Sim over Total pop = 0 Tick Complete = 192
2997 Fitness = 971.069999999975
2998 Ai: 15 Gen: 15
2999 Sim Starting
3000 Sim over Total pop = 0 Tick Complete = 93
3001 Fitness = 251.4599999999864
3002 Ai: 16 Gen: 15
3003 Sim Starting
3004 Sim over Total pop = 2 Tick Complete = 2001
3005 Fitness = 3226.819999999814
3006 Ai: 17 Gen: 15
3007 Sim Starting
3008 Sim over Total pop = 0 Tick Complete = 142
3009 Fitness = 796.9699999999887
3010 Ai: 18 Gen: 15
3011 Sim Starting
3012 Sim over Total pop = 7 Tick Complete = 2001
3013 Fitness = 3511.1999999999334
3014 Ai: 19 Gen: 15
3015 Sim Starting
3016 Sim over Total pop = 0 Tick Complete = 275
3017 Fitness = 863.0699999999895
3018 Ai: 20 Gen: 15
3019 Sim Starting
```

```
3020 Sim over Total pop = 0 Tick Complete = 70
3021 Fitness = 967.0
3022 Ai: 21 Gen: 15
3023 Sim Starting
3024 Sim over Total pop = 0 Tick Complete = 70
3025 Fitness = 693.0
3026 Ai: 22 Gen: 15
3027 Sim Starting
3028 Sim over Total pop = 0 Tick Complete = 70
3029 Fitness = 896.0
3030 Ai: 23 Gen: 15
3031 Sim Starting
3032 Sim over Total pop = 0 Tick Complete = 223
3033 Fitness = 521.6199999999972
3034 Ai: 24 Gen: 15
3035 Sim Starting
3036 Sim over Total pop = 0 Tick Complete = 585
3037 Fitness = 1632.3799999999724
3038 Ai: 25 Gen: 15
3039 Sim Starting
3040 Sim over Total pop = 0 Tick Complete = 294
3041 Fitness = 1014.049999999981
3042 Ai: 26 Gen: 15
3043 Sim Starting
3044 Sim over Total pop = 0 Tick Complete = 70
3045 Fitness = 896.0
3046 Ai: 27 Gen: 15
3047 Sim Starting
3048 Sim over Total pop = 0 Tick Complete = 68
3049 Fitness = 581.6299999999923
3050 Ai: 28 Gen: 15
3051 Sim Starting
3052 Sim over Total pop = 0 Tick Complete = 179
3053 Fitness = 1021.5499999999926
3054 Ai: 29 Gen: 15
3055 Sim Starting
3056 Sim over Total pop = 0 Tick Complete = 1216
3057 Fitness = 3166.470000000038
3058 Ai: 30 Gen: 15
3059 Sim Starting
3060 Sim over Total pop = 0 Tick Complete = 215
3061 Fitness = 1190.9299999999885
3062 Ai: 31 Gen: 15
3063 Sim Starting
```

```
3064 Sim over Total pop = 0 Tick Complete = 70
3065 Fitness = 891.0
3066 Ai: 32 Gen: 15
3067 Sim Starting
3068 Sim over Total pop = 0 Tick Complete = 283
3069 Fitness = 1222.019999999994
3070 Ai: 33 Gen: 15
3071 Sim Starting
3072 Sim over Total pop = 0 Tick Complete = 136
3073 Fitness = 762.0599999999936
3074 Ai: 34 Gen: 15
3075 Sim Starting
3076 Sim over Total pop = 0 Tick Complete = 139
3077 Fitness = 1001.3299999999897
3078 Ai: 35 Gen: 15
3079 Sim Starting
3080 Sim over Total pop = 0 Tick Complete = 504
3081 Fitness = 793.439999999997
3082 Ai: 36 Gen: 15
3083 Sim Starting
3084 Sim over Total pop = 0 Tick Complete = 603
3085 Fitness = 1029.1400000000012
3086 Ai: 37 Gen: 15
3087 Sim Starting
3088 Sim over Total pop = 2 Tick Complete = 2001
3089 Fitness = 2657.7199999998975
3090 Ai: 38 Gen: 15
3091 Sim Starting
3092 Sim over Total pop = 0 Tick Complete = 158
3093 Fitness = 859.6699999999943
3094 Ai: 39 Gen: 15
3095 Sim Starting
3096 Sim over Total pop = 0 Tick Complete = 738
3097 Fitness = 1957.6800000000317
3098 Ai: 40 Gen: 15
3099 Sim Starting
3100 Sim over Total pop = 0 Tick Complete = 774
3101 Fitness = 855.8200000000065
3102 Ai: 41 Gen: 15
3103 Sim Starting
3104 Sim over Total pop = 0 Tick Complete = 269
3105 Fitness = 828.1599999999946
3106 Ai: 42 Gen: 15
3107 Sim Starting
```

```
3108 Sim over Total pop = 0 Tick Complete = 908
3109 Fitness = 1110.9200000000002
3110 Ai: 43 Gen: 15
3111 Sim Starting
3112 Sim over Total pop = 0 Tick Complete = 373
3113 Fitness = 1467.7099999999996
3114 Ai: 44 Gen: 15
3115 Sim Starting
3116 Sim over Total pop = 0 Tick Complete = 59
3117 Fitness = 211.10999999999774
3118 Ai: 45 Gen: 15
3119 Sim Starting
3120 Sim over Total pop = 0 Tick Complete = 663
3121 Fitness = 1764.6099999999515
3122 Ai: 46 Gen: 15
3123 Sim Starting
3124 Sim over Total pop = 0 Tick Complete = 485
3125 Fitness = 1435.219999999973
3126 Ai: 47 Gen: 15
3127 Sim Starting
3128 Sim over Total pop = 2 Tick Complete = 2001
3129 Fitness = 2413.719999999965
3130 Mean Fitness of Gen 15 is 1287.38354166665 and
    best fitness 3511.199999999334
3131 Ai: 0 Gen: 16
3132 Sim Starting
3133 Sim over Total pop = 0 Tick Complete = 70
3134 Fitness = 896.0
3135 Ai: 1 Gen: 16
3136 Sim Starting
3137 Sim over Total pop = 0 Tick Complete = 70
3138 Fitness = 825.0
3139 Ai: 2 Gen: 16
3140 Sim Starting
3141 Sim over Total pop = 0 Tick Complete = 165
3142 Fitness = 1000.599999999976
3143 Ai: 3 Gen: 16
3144 Sim Starting
3145 Sim over Total pop = 0 Tick Complete = 206
3146 Fitness = 1295.469999999989
3147 Ai: 4 Gen: 16
3148 Sim Starting
3149 Sim over Total pop = 0 Tick Complete = 314
3150 Fitness = 1216.2899999999886
```

```
3151 Ai: 5 Gen: 16
3152 Sim Starting
3153 Sim over Total pop = 0 Tick Complete = 1120
3154 Fitness = 1956.1900000000444
3155 Ai: 6 Gen: 16
3156 Sim Starting
3157 Sim over Total pop = 0 Tick Complete = 133
3158 Fitness = 800.4399999999941
3159 Ai: 7 Gen: 16
3160 Sim Starting
3161 Sim over Total pop = 0 Tick Complete = 70
3162 Fitness = 830.0
3163 Ai: 8 Gen: 16
3164 Sim Starting
3165 Sim over Total pop = 0 Tick Complete = 516
3166 Fitness = 2410.129999999975
3167 Ai: 9 Gen: 16
3168 Sim Starting
3169 Sim over Total pop = 0 Tick Complete = 139
3170 Fitness = 1147.3000000000027
3171 Ai: 10 Gen: 16
3172 Sim Starting
3173 Sim over Total pop = 0 Tick Complete = 70
3174 Fitness = 562.4499999999938
3175 Ai: 11 Gen: 16
3176 Sim Starting
3177 Sim over Total pop = 2 Tick Complete = 2001
3178 Fitness = 2599.8099999998817
3179 Ai: 12 Gen: 16
3180 Sim Starting
3181 Sim over Total pop = 0 Tick Complete = 200
3182 Fitness = 986.1999999999986
3183 Ai: 13 Gen: 16
3184 Sim Starting
3185 Sim over Total pop = 0 Tick Complete = 144
3186 Fitness = 794.7599999999953
3187 Ai: 14 Gen: 16
3188 Sim Starting
3189 Sim over Total pop = 0 Tick Complete = 70
3190 Fitness = 693.0
3191 Ai: 15 Gen: 16
3192 Sim Starting
3193 Sim over Total pop = 0 Tick Complete = 166
3194 Fitness = 824.4199999999901
```

```
3195 Ai: 16 Gen: 16
3196 Sim Starting
3197 Sim over Total pop = 0 Tick Complete = 196
3198 Fitness = 725.009999999993
3199 Ai: 17 Gen: 16
3200 Sim Starting
3201 Sim over Total pop = 0 Tick Complete = 72
3202 Fitness = 154.67999999999705
3203 Ai: 18 Gen: 16
3204 Sim Starting
3205 Sim over Total pop = 0 Tick Complete = 81
3206 Fitness = 187.74999999999665
3207 Ai: 19 Gen: 16
3208 Sim Starting
3209 Sim over Total pop = 0 Tick Complete = 192
3210 Fitness = 225.53999999999908
3211 Ai: 20 Gen: 16
3212 Sim Starting
3213 Sim over Total pop = 0 Tick Complete = 949
3214 Fitness = 2015.0899999999504
3215 Ai: 21 Gen: 16
3216 Sim Starting
3217 Sim over Total pop = 0 Tick Complete = 81
3218 Fitness = 314.8099999999943
3219 Ai: 22 Gen: 16
3220 Sim Starting
3221 Sim over Total pop = 0 Tick Complete = 317
3222 Fitness = 578.509999999995
3223 Ai: 23 Gen: 16
3224 Sim Starting
3225 Sim over Total pop = 0 Tick Complete = 186
3226 Fitness = 1128.3799999999965
3227 Ai: 24 Gen: 16
3228 Sim Starting
3229 Sim over Total pop = 0 Tick Complete = 398
3230 Fitness = 1391.319999999992
3231 Ai: 25 Gen: 16
3232 Sim Starting
3233 Sim over Total pop = 0 Tick Complete = 88
3234 Fitness = 628.589999999989
3235 Ai: 26 Gen: 16
3236 Sim Starting
3237 Sim over Total pop = 0 Tick Complete = 773
3238 Fitness = 2144.300000000014
```

```
3239 Ai: 27 Gen: 16
3240 Sim Starting
3241 Sim over Total pop = 0 Tick Complete = 157
3242 Fitness = 266.01999999999316
3243 Ai: 28 Gen: 16
3244 Sim Starting
3245 Sim over Total pop = 0 Tick Complete = 423
3246 Fitness = 1516.0299999999969
3247 Ai: 29 Gen: 16
3248 Sim Starting
3249 Sim over Total pop = 0 Tick Complete = 251
3250 Fitness = 1080.35999999999665
3251 Ai: 30 Gen: 16
3252 Sim Starting
3253 Sim over Total pop = 0 Tick Complete = 417
3254 Fitness = 2071.3300000000045
3255 Ai: 31 Gen: 16
3256 Sim Starting
3257 Sim over Total pop = 0 Tick Complete = 87
3258 Fitness = 689.5599999999931
3259 Ai: 32 Gen: 16
3260 Sim Starting
3261 Sim over Total pop = 0 Tick Complete = 195
3262 Fitness = 1040.8799999999906
3263 Ai: 33 Gen: 16
3264 Sim Starting
3265 Sim over Total pop = 0 Tick Complete = 236
3266 Fitness = 1163.5600000000013
3267 Ai: 34 Gen: 16
3268 Sim Starting
3269 Sim over Total pop = 0 Tick Complete = 288
3270 Fitness = 1130.630000000011
3271 Ai: 35 Gen: 16
3272 Sim Starting
3273 Sim over Total pop = 0 Tick Complete = 215
3274 Fitness = 1049.2399999999989
3275 Ai: 36 Gen: 16
3276 Sim Starting
3277 Sim over Total pop = 0 Tick Complete = 62
3278 Fitness = 670.8199999999983
3279 Ai: 37 Gen: 16
3280 Sim Starting
3281 Sim over Total pop = 0 Tick Complete = 1340
3282 Fitness = 2618.2699999998777
```

```
3283 Ai: 38 Gen: 16
3284 Sim Starting
3285 Sim over Total pop = 0 Tick Complete = 1215
3286 Fitness = 2879.9099999999976
3287 Ai: 39 Gen: 16
3288 Sim Starting
3289 Sim over Total pop = 0 Tick Complete = 301
3290 Fitness = 1285.6999999999937
3291 Ai: 40 Gen: 16
3292 Sim Starting
3293 Sim over Total pop = 0 Tick Complete = 70
3294 Fitness = 769.0
3295 Ai: 41 Gen: 16
3296 Sim Starting
3297 Sim over Total pop = 0 Tick Complete = 151
3298 Fitness = 835.2199999999979
3299 Ai: 42 Gen: 16
3300 Sim Starting
3301 Sim over Total pop = 0 Tick Complete = 136
3302 Fitness = 643.6899999999912
3303 Ai: 43 Gen: 16
3304 Sim Starting
3305 Sim over Total pop = 0 Tick Complete = 1140
3306 Fitness = 2175.26999999999854
3307 Ai: 44 Gen: 16
3308 Sim Starting
3309 Sim over Total pop = 0 Tick Complete = 275
3310 Fitness = 1485.6599999999999
3311 Ai: 45 Gen: 16
3312 Sim Starting
3313 Sim over Total pop = 0 Tick Complete = 70
3314 Fitness = 764.0
3315 Ai: 46 Gen: 16
3316 Sim Starting
3317 Sim over Total pop = 0 Tick Complete = 255
3318 Fitness = 1256.76000000001
3319 Ai: 47 Gen: 16
3320 Sim Starting
3321 Sim over Total pop = 0 Tick Complete = 84
3322 Fitness = 810.8999999999988
3323 Mean Fitness of Gen 16 is 1136.1427083333238 and
best fitness 2879.9099999999976
3324 Ai: 0 Gen: 17
3325 Sim Starting
```

```
3326 Sim over Total pop = 0 Tick Complete = 143
3327 Fitness = 750.1699999999905
3328 Ai: 1 Gen: 17
3329 Sim Starting
3330 Sim over Total pop = 0 Tick Complete = 364
3331 Fitness = 1178.459999999998
3332 Ai: 2 Gen: 17
3333 Sim Starting
3334 Sim over Total pop = 0 Tick Complete = 170
3335 Fitness = 937.1000000000009
3336 Ai: 3 Gen: 17
3337 Sim Starting
3338 Sim over Total pop = 0 Tick Complete = 167
3339 Fitness = 950.7399999999964
3340 Ai: 4 Gen: 17
3341 Sim Starting
3342 Sim over Total pop = 0 Tick Complete = 70
3343 Fitness = 825.0
3344 Ai: 5 Gen: 17
3345 Sim Starting
3346 Sim over Total pop = 0 Tick Complete = 105
3347 Fitness = 363.52999999999105
3348 Ai: 6 Gen: 17
3349 Sim Starting
3350 Sim over Total pop = 0 Tick Complete = 1122
3351 Fitness = 1622.6399999999592
3352 Ai: 7 Gen: 17
3353 Sim Starting
3354 Sim over Total pop = 0 Tick Complete = 339
3355 Fitness = 1300.0100000000084
3356 Ai: 8 Gen: 17
3357 Sim Starting
3358 Sim over Total pop = 0 Tick Complete = 70
3359 Fitness = 896.0
3360 Ai: 9 Gen: 17
3361 Sim Starting
3362 Sim over Total pop = 0 Tick Complete = 61
3363 Fitness = 553.2399999999889
3364 Ai: 10 Gen: 17
3365 Sim Starting
3366 Sim over Total pop = 2 Tick Complete = 2001
3367 Fitness = 4063.9500000011035
3368 Ai: 11 Gen: 17
3369 Sim Starting
```

```
3370 Sim over Total pop = 0 Tick Complete = 68
3371 Fitness = 713.3999999999996
3372 Ai: 12 Gen: 17
3373 Sim Starting
3374 Sim over Total pop = 0 Tick Complete = 70
3375 Fitness = 825.0
3376 Ai: 13 Gen: 17
3377 Sim Starting
3378 Sim over Total pop = 0 Tick Complete = 66
3379 Fitness = 597.2799999999919
3380 Ai: 14 Gen: 17
3381 Sim Starting
3382 Sim over Total pop = 0 Tick Complete = 70
3383 Fitness = 764.0
3384 Ai: 15 Gen: 17
3385 Sim Starting
3386 Sim over Total pop = 0 Tick Complete = 65
3387 Fitness = 152.18999999999724
3388 Ai: 16 Gen: 17
3389 Sim Starting
3390 Sim over Total pop = 0 Tick Complete = 71
3391 Fitness = 177.98999999999563
3392 Ai: 17 Gen: 17
3393 Sim Starting
3394 Sim over Total pop = 0 Tick Complete = 221
3395 Fitness = 588.2699999999966
3396 Ai: 18 Gen: 17
3397 Sim Starting
3398 Sim over Total pop = 0 Tick Complete = 348
3399 Fitness = 1014.2400000000193
3400 Ai: 19 Gen: 17
3401 Sim Starting
3402 Sim over Total pop = 0 Tick Complete = 251
3403 Fitness = 520.4099999999916
3404 Ai: 20 Gen: 17
3405 Sim Starting
3406 Sim over Total pop = 0 Tick Complete = 211
3407 Fitness = 932.560000000002
3408 Ai: 21 Gen: 17
3409 Sim Starting
3410 Sim over Total pop = 0 Tick Complete = 302
3411 Fitness = 1318.0299999999386
3412 Ai: 22 Gen: 17
3413 Sim Starting
```

```
3414 Sim over Total pop = 0 Tick Complete = 67
3415 Fitness = 638.9099999999942
3416 Ai: 23 Gen: 17
3417 Sim Starting
3418 Sim over Total pop = 0 Tick Complete = 202
3419 Fitness = 1082.3400000000022
3420 Ai: 24 Gen: 17
3421 Sim Starting
3422 Sim over Total pop = 0 Tick Complete = 280
3423 Fitness = 1023.8899999999669
3424 Ai: 25 Gen: 17
3425 Sim Starting
3426 Sim over Total pop = 0 Tick Complete = 592
3427 Fitness = 1984.639999999999
3428 Ai: 26 Gen: 17
3429 Sim Starting
3430 Sim over Total pop = 0 Tick Complete = 446
3431 Fitness = 1313.7199999999832
3432 Ai: 27 Gen: 17
3433 Sim Starting
3434 Sim over Total pop = 0 Tick Complete = 231
3435 Fitness = 1047.059999999959
3436 Ai: 28 Gen: 17
3437 Sim Starting
3438 Sim over Total pop = 0 Tick Complete = 406
3439 Fitness = 1055.3599999999876
3440 Ai: 29 Gen: 17
3441 Sim Starting
3442 Sim over Total pop = 0 Tick Complete = 231
3443 Fitness = 877.4399999999895
3444 Ai: 30 Gen: 17
3445 Sim Starting
3446 Sim over Total pop = 0 Tick Complete = 306
3447 Fitness = 1326.0300000000036
3448 Ai: 31 Gen: 17
3449 Sim Starting
3450 Sim over Total pop = 0 Tick Complete = 83
3451 Fitness = 628.1299999999881
3452 Ai: 32 Gen: 17
3453 Sim Starting
3454 Sim over Total pop = 0 Tick Complete = 242
3455 Fitness = 276.5999999999958
3456 Ai: 33 Gen: 17
3457 Sim Starting
```

```
3458 Sim over Total pop = 0 Tick Complete = 70
3459 Fitness = 896.0
3460 Ai: 34 Gen: 17
3461 Sim Starting
3462 Sim over Total pop = 0 Tick Complete = 151
3463 Fitness = 857.6199999999998
3464 Ai: 35 Gen: 17
3465 Sim Starting
3466 Sim over Total pop = 0 Tick Complete = 962
3467 Fitness = 2490.469999999952
3468 Ai: 36 Gen: 17
3469 Sim Starting
3470 Sim over Total pop = 0 Tick Complete = 333
3471 Fitness = 1644.5399999999945
3472 Ai: 37 Gen: 17
3473 Sim Starting
3474 Sim over Total pop = 0 Tick Complete = 251
3475 Fitness = 1160.3899999999776
3476 Ai: 38 Gen: 17
3477 Sim Starting
3478 Sim over Total pop = 0 Tick Complete = 141
3479 Fitness = 969.7899999999947
3480 Ai: 39 Gen: 17
3481 Sim Starting
3482 Sim over Total pop = 0 Tick Complete = 1216
3483 Fitness = 2086.9899999999693
3484 Ai: 40 Gen: 17
3485 Sim Starting
3486 Sim over Total pop = 0 Tick Complete = 201
3487 Fitness = 920.3499999999993
3488 Ai: 41 Gen: 17
3489 Sim Starting
3490 Sim over Total pop = 0 Tick Complete = 709
3491 Fitness = 2035.5199999999718
3492 Ai: 42 Gen: 17
3493 Sim Starting
3494 Sim over Total pop = 0 Tick Complete = 112
3495 Fitness = 594.0499999999914
3496 Ai: 43 Gen: 17
3497 Sim Starting
3498
3499 Name: 1
3500 X: 88
3501 Y: 68
```

```
3502 civpop: 2
3503 trooppop: 1
3504 rawresources: 962.1000000000001
3505 equipment: 360.0
3506 rate: 1.5
3507 popraw: 0
3508 popequip: 0.5
3509 %TroopsSupplied: 100
3510
3511 Name: 1
3512 X: 88
3513 Y: 68
3514 civpop: 2
3515 trooppop: 1
3516 rawresources: 528.6000000000001
3517 equipment: 504.5
3518 rate: 1.5
3519 popraw: 0
3520 popequip: 0.5
3521 %TroopsSupplied: 100
3522 Sim over Total pop = 2 Tick Complete = 2001
3523 Fitness = 3146.719999999827
3524 Ai: 44 Gen: 17
3525 Sim Starting
3526 Sim over Total pop = 0 Tick Complete = 489
3527 Fitness = 1965.6099999999585
3528 Ai: 45 Gen: 17
3529 Sim Starting
3530 Sim over Total pop = 0 Tick Complete = 206
3531 Fitness = 908.3699999999985
3532 Ai: 46 Gen: 17
3533 Sim Starting
3534 Sim over Total pop = 0 Tick Complete = 1730
3535 Fitness = 2828.219999999971
3536 Ai: 47 Gen: 17
3537 Sim Starting
3538 Sim over Total pop = 0 Tick Complete = 70
3539 Fitness = 968.6899999999985
3540 Ai: 48 Gen: 17
3541 Sim Starting
3542 Sim over Total pop = 0 Tick Complete = 294
3543 Fitness = 1079.719999999992
3544 Mean Fitness of Gen 17 is 1160.2322448979678 and
best fitness 4063.9500000011035
```

```
3545 Ai: 0 Gen: 18
3546 Sim Starting
3547 Sim over Total pop = 0 Tick Complete = 170
3548 Fitness = 1086.7099999999962
3549 Ai: 1 Gen: 18
3550 Sim Starting
3551 Sim over Total pop = 0 Tick Complete = 70
3552 Fitness = 830.0
3553 Ai: 2 Gen: 18
3554 Sim Starting
3555 Sim over Total pop = 0 Tick Complete = 70
3556 Fitness = 1028.0
3557 Ai: 3 Gen: 18
3558 Sim Starting
3559 Sim over Total pop = 0 Tick Complete = 70
3560 Fitness = 962.0
3561 Ai: 4 Gen: 18
3562 Sim Starting
3563 Sim over Total pop = 0 Tick Complete = 814
3564 Fitness = 1726.44999999996
3565 Ai: 5 Gen: 18
3566 Sim Starting
3567 Sim over Total pop = 0 Tick Complete = 154
3568 Fitness = 389.83999999999145
3569 Ai: 6 Gen: 18
3570 Sim Starting
3571
3572 Name: 1
3573 X: 300
3574 Y: 49
3575 civpop: 2
3576 trooppop: 1
3577 rawresources: 0
3578 equipment: 2278
3579 rate: 1.9
3580 popraw: 0
3581 popequip: 0.5
3582 %TroopsSupplied: 100
3583
3584 Name: 1
3585 X: 300
3586 Y: 49
3587 civpop: 2
3588 trooppop: 1
```

```
3589 rawresources: 0
3590 equipment: 2226
3591 rate: 1.9
3592 popraw: 0
3593 popequip: 0.5
3594 %TroopsSupplied: 100
3595 Sim over Total pop = 2 Tick Complete = 2001
3596 Fitness = 3685.329999999753
3597 Ai: 7 Gen: 18
3598 Sim Starting
3599 Sim over Total pop = 0 Tick Complete = 272
3600 Fitness = 1401.389999999828
3601 Ai: 8 Gen: 18
3602 Sim Starting
3603 Sim over Total pop = 0 Tick Complete = 168
3604 Fitness = 1094.339999999972
3605 Ai: 9 Gen: 18
3606 Sim Starting
3607 Sim over Total pop = 0 Tick Complete = 328
3608 Fitness = 813.499999999991
3609 Ai: 10 Gen: 18
3610 Sim Starting
3611 Sim over Total pop = 0 Tick Complete = 66
3612 Fitness = 499.6599999999979
3613 Ai: 11 Gen: 18
3614 Sim Starting
3615 Sim over Total pop = 0 Tick Complete = 229
3616 Fitness = 1145.729999999825
3617 Ai: 12 Gen: 18
3618 Sim Starting
3619 Sim over Total pop = 0 Tick Complete = 377
3620 Fitness = 1573.819999999983
3621 Ai: 13 Gen: 18
3622 Sim Starting
3623
3624 Name: 3
3625 X: 981
3626 Y: 288
3627 civpop: 45
3628 trooppop: 36
3629 rawresources: 5189.70000000001
3630 equipment: 1826.0
3631 rate: 1.9
3632 popraw: 0
```

```
3633 popequip: 0.5
3634 %TroopsSupplied: 100
3635 Sim over Total pop = 0 Tick Complete = 422
3636 Fitness = 1704.3199999999897
3637 Ai: 14 Gen: 18
3638 Sim Starting
3639 Sim over Total pop = 0 Tick Complete = 484
3640 Fitness = 985.8000000000138
3641 Ai: 15 Gen: 18
3642 Sim Starting
3643 Sim over Total pop = 0 Tick Complete = 111
3644 Fitness = 654.0099999999914
3645 Ai: 16 Gen: 18
3646 Sim Starting
3647 Sim over Total pop = 0 Tick Complete = 228
3648 Fitness = 514.3699999999969
3649 Ai: 17 Gen: 18
3650 Sim Starting
3651 Sim over Total pop = 0 Tick Complete = 207
3652 Fitness = 1020.4999999999922
3653 Ai: 18 Gen: 18
3654 Sim Starting
3655 Sim over Total pop = 0 Tick Complete = 128
3656 Fitness = 871.929999999993
3657 Ai: 19 Gen: 18
3658 Sim Starting
3659 Sim over Total pop = 0 Tick Complete = 64
3660 Fitness = 180.40999999999286
3661 Ai: 20 Gen: 18
3662 Sim Starting
3663 Sim over Total pop = 0 Tick Complete = 245
3664 Fitness = 558.9599999999866
3665 Ai: 21 Gen: 18
3666 Sim Starting
3667 Sim over Total pop = 0 Tick Complete = 65
3668 Fitness = 563.569999999999
3669 Ai: 22 Gen: 18
3670 Sim Starting
3671 Sim over Total pop = 0 Tick Complete = 402
3672 Fitness = 660.4199999999998
3673 Ai: 23 Gen: 18
3674 Sim Starting
3675 Sim over Total pop = 0 Tick Complete = 380
3676 Fitness = 1105.7900000000022
```

```
3677 Ai: 24 Gen: 18
3678 Sim Starting
3679 Sim over Total pop = 0 Tick Complete = 224
3680 Fitness = 828.5199999999941
3681 Ai: 25 Gen: 18
3682 Sim Starting
3683 Sim over Total pop = 0 Tick Complete = 60
3684 Fitness = 94.50999999999735
3685 Ai: 26 Gen: 18
3686 Sim Starting
3687 Sim over Total pop = 0 Tick Complete = 362
3688 Fitness = 1090.819999999985
3689 Ai: 27 Gen: 18
3690 Sim Starting
3691 Sim over Total pop = 0 Tick Complete = 285
3692 Fitness = 991.189999999991
3693 Ai: 28 Gen: 18
3694 Sim Starting
3695 Sim over Total pop = 0 Tick Complete = 626
3696 Fitness = 2457.7200000000257
3697 Ai: 29 Gen: 18
3698 Sim Starting
3699 Sim over Total pop = 0 Tick Complete = 179
3700 Fitness = 1036.2899999999904
3701 Ai: 30 Gen: 18
3702 Sim Starting
3703 Sim over Total pop = 2 Tick Complete = 2001
3704 Fitness = 2599.729999999993
3705 Ai: 31 Gen: 18
3706 Sim Starting
3707 Sim over Total pop = 0 Tick Complete = 124
3708 Fitness = 126.0299999999903
3709 Ai: 32 Gen: 18
3710 Sim Starting
3711 Sim over Total pop = 0 Tick Complete = 184
3712 Fitness = 1000.0300000000013
3713 Ai: 33 Gen: 18
3714 Sim Starting
3715 Sim over Total pop = 0 Tick Complete = 491
3716 Fitness = 1507.5299999999978
3717 Ai: 34 Gen: 18
3718 Sim Starting
3719 Sim over Total pop = 0 Tick Complete = 161
3720 Fitness = 798.21999999999767
```

```
3721 Ai: 35 Gen: 18
3722 Sim Starting
3723 Sim over Total pop = 0 Tick Complete = 332
3724 Fitness = 1466.930000000007
3725 Ai: 36 Gen: 18
3726 Sim Starting
3727 Sim over Total pop = 0 Tick Complete = 316
3728 Fitness = 784.1899999999832
3729 Ai: 37 Gen: 18
3730 Sim Starting
3731 Sim over Total pop = 0 Tick Complete = 239
3732 Fitness = 1236.1999999999869
3733 Ai: 38 Gen: 18
3734 Sim Starting
3735 Sim over Total pop = 0 Tick Complete = 70
3736 Fitness = 891.0
3737 Ai: 39 Gen: 18
3738 Sim Starting
3739 Sim over Total pop = 0 Tick Complete = 491
3740 Fitness = 1447.6199999999749
3741 Ai: 40 Gen: 18
3742 Sim Starting
3743 Sim over Total pop = 0 Tick Complete = 162
3744 Fitness = 956.7399999999903
3745 Ai: 41 Gen: 18
3746 Sim Starting
3747 Sim over Total pop = 0 Tick Complete = 66
3748 Fitness = 611.2199999999975
3749 Ai: 42 Gen: 18
3750 Sim Starting
3751 Sim over Total pop = 0 Tick Complete = 161
3752 Fitness = 979.2499999999948
3753 Ai: 43 Gen: 18
3754 Sim Starting
3755 Sim over Total pop = 0 Tick Complete = 283
3756 Fitness = 1761.819999999988
3757 Ai: 44 Gen: 18
3758 Sim Starting
3759 Sim over Total pop = 0 Tick Complete = 314
3760 Fitness = 1035.6600000000033
3761 Ai: 45 Gen: 18
3762 Sim Starting
3763 Sim over Total pop = 0 Tick Complete = 304
3764 Fitness = 1405.4099999999714
```

```
3765 Ai: 46 Gen: 18
3766 Sim Starting
3767 Sim over Total pop = 0 Tick Complete = 242
3768 Fitness = 1031.509999999992
3769 Ai: 47 Gen: 18
3770 Sim Starting
3771 Sim over Total pop = 0 Tick Complete = 860
3772 Fitness = 1530.5399999999836
3773 Ai: 48 Gen: 18
3774 Sim Starting
3775 Sim over Total pop = 0 Tick Complete = 70
3776 Fitness = 957.0
3777 Ai: 49 Gen: 18
3778 Sim Starting
3779 Sim over Total pop = 0 Tick Complete = 70
3780 Fitness = 829.579999999999
3781 Ai: 50 Gen: 18
3782 Sim Starting
3783 Sim over Total pop = 0 Tick Complete = 313
3784 Fitness = 1432.8299999999983
3785 Mean Fitness of Gen 18 is 1096.9596078431248 and
    best fitness 3685.3299999997753
3786 Ai: 0 Gen: 19
3787 Sim Starting
3788 Sim over Total pop = 0 Tick Complete = 70
3789 Fitness = 705.5299999999932
3790 Ai: 1 Gen: 19
3791 Sim Starting
3792 Sim over Total pop = 0 Tick Complete = 70
3793 Fitness = 769.0
3794 Ai: 2 Gen: 19
3795 Sim Starting
3796 Sim over Total pop = 0 Tick Complete = 151
3797 Fitness = 675.9399999999878
3798 Ai: 3 Gen: 19
3799 Sim Starting
3800 Sim over Total pop = 0 Tick Complete = 218
3801 Fitness = 817.0099999999948
3802 Ai: 4 Gen: 19
3803 Sim Starting
3804 Sim over Total pop = 0 Tick Complete = 62
3805 Fitness = 256.1599999999953
3806 Ai: 5 Gen: 19
3807 Sim Starting
```

```
3808 Sim over Total pop = 0 Tick Complete = 437
3809 Fitness = 1136.069999999987
3810 Ai: 6 Gen: 19
3811 Sim Starting
3812 Sim over Total pop = 0 Tick Complete = 70
3813 Fitness = 891.0
3814 Ai: 7 Gen: 19
3815 Sim Starting
3816 Sim over Total pop = 0 Tick Complete = 338
3817 Fitness = 1047.0899999999845
3818 Ai: 8 Gen: 19
3819 Sim Starting
3820 Sim over Total pop = 0 Tick Complete = 817
3821 Fitness = 2234.769999999983
3822 Ai: 9 Gen: 19
3823 Sim Starting
3824 Sim over Total pop = 0 Tick Complete = 338
3825 Fitness = 1406.01999999998
3826 Ai: 10 Gen: 19
3827 Sim Starting
3828 Sim over Total pop = 0 Tick Complete = 893
3829 Fitness = 1650.879999999992
3830 Ai: 11 Gen: 19
3831 Sim Starting
3832 Sim over Total pop = 0 Tick Complete = 653
3833 Fitness = 1484.9599999999914
3834 Ai: 12 Gen: 19
3835 Sim Starting
3836 Sim over Total pop = 0 Tick Complete = 74
3837 Fitness = 855.3599999999997
3838 Ai: 13 Gen: 19
3839 Sim Starting
3840 Sim over Total pop = 0 Tick Complete = 280
3841 Fitness = 870.4799999999833
3842 Ai: 14 Gen: 19
3843 Sim Starting
3844 Sim over Total pop = 0 Tick Complete = 130
3845 Fitness = 745.0299999999926
3846 Ai: 15 Gen: 19
3847 Sim Starting
3848 Sim over Total pop = 0 Tick Complete = 527
3849 Fitness = 1833.9099999999482
3850 Ai: 16 Gen: 19
3851 Sim Starting
```

```
3852 Sim over Total pop = 0 Tick Complete = 267
3853 Fitness = 1007.8199999999875
3854 Ai: 17 Gen: 19
3855 Sim Starting
3856 Sim over Total pop = 0 Tick Complete = 625
3857 Fitness = 1701.5199999999634
3858 Ai: 18 Gen: 19
3859 Sim Starting
3860 Sim over Total pop = 2 Tick Complete = 2001
3861 Fitness = 3094.5099999998365
3862 Ai: 19 Gen: 19
3863 Sim Starting
3864 Sim over Total pop = 0 Tick Complete = 236
3865 Fitness = 1181.9399999999916
3866 Ai: 20 Gen: 19
3867 Sim Starting
3868 Sim over Total pop = 0 Tick Complete = 76
3869 Fitness = 106.3799999999512
3870 Ai: 21 Gen: 19
3871 Sim Starting
3872 Sim over Total pop = 0 Tick Complete = 349
3873 Fitness = 1214.1299999999492
3874 Ai: 22 Gen: 19
3875 Sim Starting
3876 Sim over Total pop = 0 Tick Complete = 157
3877 Fitness = 1070.2199999999916
3878 Ai: 23 Gen: 19
3879 Sim Starting
3880 Sim over Total pop = 0 Tick Complete = 70
3881 Fitness = 891.0
3882 Ai: 24 Gen: 19
3883 Sim Starting
3884 Sim over Total pop = 0 Tick Complete = 137
3885 Fitness = 784.8899999999962
3886 Ai: 25 Gen: 19
3887 Sim Starting
3888 Sim over Total pop = 0 Tick Complete = 264
3889 Fitness = 844.7599999999726
3890 Ai: 26 Gen: 19
3891 Sim Starting
3892 Sim over Total pop = 0 Tick Complete = 230
3893 Fitness = 1022.7400000000013
3894 Ai: 27 Gen: 19
3895 Sim Starting
```

```
3896 Sim over Total pop = 0 Tick Complete = 451
3897 Fitness = 1732.06000000000027
3898 Ai: 28 Gen: 19
3899 Sim Starting
3900 Sim over Total pop = 0 Tick Complete = 216
3901 Fitness = 995.6099999999772
3902 Ai: 29 Gen: 19
3903 Sim Starting
3904 Sim over Total pop = 0 Tick Complete = 770
3905 Fitness = 1583.049999999986
3906 Ai: 30 Gen: 19
3907 Sim Starting
3908 Sim over Total pop = 0 Tick Complete = 70
3909 Fitness = 1020.47
3910 Ai: 31 Gen: 19
3911 Sim Starting
3912 Sim over Total pop = 0 Tick Complete = 63
3913 Fitness = 570.5599999999937
3914 Ai: 32 Gen: 19
3915 Sim Starting
3916 Sim over Total pop = 0 Tick Complete = 249
3917 Fitness = 1059.4499999999784
3918 Ai: 33 Gen: 19
3919 Sim Starting
3920 Sim over Total pop = 0 Tick Complete = 62
3921 Fitness = 553.239999999994
3922 Ai: 34 Gen: 19
3923 Sim Starting
3924 Sim over Total pop = 0 Tick Complete = 70
3925 Fitness = 825.0
3926 Ai: 35 Gen: 19
3927 Sim Starting
3928 Sim over Total pop = 0 Tick Complete = 1010
3929 Fitness = 2320.799999999927
3930 Ai: 36 Gen: 19
3931 Sim Starting
3932 Sim over Total pop = 0 Tick Complete = 70
3933 Fitness = 830.0
3934 Ai: 37 Gen: 19
3935 Sim Starting
3936 Sim over Total pop = 0 Tick Complete = 178
3937 Fitness = 834.319999999994
3938 Ai: 38 Gen: 19
3939 Sim Starting
```

```
3940 Sim over Total pop = 0 Tick Complete = 269
3941 Fitness = 1241.229999999985
3942 Ai: 39 Gen: 19
3943 Sim Starting
3944 Sim over Total pop = 0 Tick Complete = 554
3945 Fitness = 1142.3199999999842
3946 Ai: 40 Gen: 19
3947 Sim Starting
3948 Sim over Total pop = 0 Tick Complete = 1610
3949 Fitness = 2579.7199999999834
3950 Ai: 41 Gen: 19
3951 Sim Starting
3952 Sim over Total pop = 0 Tick Complete = 843
3953 Fitness = 1700.8900000000226
3954 Ai: 42 Gen: 19
3955 Sim Starting
3956 Sim over Total pop = 0 Tick Complete = 161
3957 Fitness = 818.5899999999897
3958 Ai: 43 Gen: 19
3959 Sim Starting
3960 Sim over Total pop = 0 Tick Complete = 453
3961 Fitness = 1522.8399999999647
3962 Ai: 44 Gen: 19
3963 Sim Starting
3964 Sim over Total pop = 0 Tick Complete = 1799
3965 Fitness = 2093.5999999999917
3966 Ai: 45 Gen: 19
3967 Sim Starting
3968 Sim over Total pop = 0 Tick Complete = 57
3969 Fitness = 55.27999999999276
3970 Ai: 46 Gen: 19
3971 Sim Starting
3972 Sim over Total pop = 0 Tick Complete = 307
3973 Fitness = 457.5799999999984
3974 Ai: 47 Gen: 19
3975 Sim Starting
3976 Sim over Total pop = 0 Tick Complete = 227
3977 Fitness = 251.529999999999
3978 Ai: 48 Gen: 19
3979 Sim Starting
3980 Sim over Total pop = 0 Tick Complete = 598
3981 Fitness = 1228.5000000000189
3982 Ai: 49 Gen: 19
3983 Sim Starting
```

```
3984 Sim over Total pop = 0 Tick Complete = 159
3985 Fitness = 274.37999999999556
3986 Mean Fitness of Gen 19 is 1119.802799999986 and
best fitness 3094.5099999998365
3987 Ai: 0 Gen: 20
3988 Sim Starting
3989 Sim over Total pop = 0 Tick Complete = 73
3990 Fitness = 359.14999999999515
3991 Ai: 1 Gen: 20
3992 Sim Starting
3993 Sim over Total pop = 0 Tick Complete = 70
3994 Fitness = 698.0
3995 Ai: 2 Gen: 20
3996 Sim Starting
3997 Sim over Total pop = 0 Tick Complete = 411
3998 Fitness = 842.3399999999996
3999 Ai: 3 Gen: 20
4000 Sim Starting
4001 Sim over Total pop = 0 Tick Complete = 151
4002 Fitness = 858.3799999999941
4003 Ai: 4 Gen: 20
4004 Sim Starting
4005 Sim over Total pop = 0 Tick Complete = 85
4006 Fitness = 661.9899999999947
4007 Ai: 5 Gen: 20
4008 Sim Starting
4009 Sim over Total pop = 0 Tick Complete = 82
4010 Fitness = 993.6599999999992
4011 Ai: 6 Gen: 20
4012 Sim Starting
4013 Sim over Total pop = 0 Tick Complete = 466
4014 Fitness = 1188.459999999996
4015 Ai: 7 Gen: 20
4016 Sim Starting
4017 Sim over Total pop = 0 Tick Complete = 72
4018 Fitness = 588.2199999999921
4019 Ai: 8 Gen: 20
4020 Sim Starting
4021 Sim over Total pop = 0 Tick Complete = 231
4022 Fitness = 1144.939999999991
4023 Ai: 9 Gen: 20
4024 Sim Starting
4025 Sim over Total pop = 0 Tick Complete = 518
4026 Fitness = 2031.1499999999949
```

```
4027 Ai: 10 Gen: 20
4028 Sim Starting
4029 Sim over Total pop = 0 Tick Complete = 282
4030 Fitness = 358.7299999999847
4031 Ai: 11 Gen: 20
4032 Sim Starting
4033 Sim over Total pop = 0 Tick Complete = 97
4034 Fitness = 772.4100000000002
4035 Ai: 12 Gen: 20
4036 Sim Starting
4037 Sim over Total pop = 0 Tick Complete = 86
4038 Fitness = 371.44999999998873
4039 Ai: 13 Gen: 20
4040 Sim Starting
4041 Sim over Total pop = 0 Tick Complete = 149
4042 Fitness = 238.5699999999952
4043 Ai: 14 Gen: 20
4044 Sim Starting
4045 Sim over Total pop = 0 Tick Complete = 92
4046 Fitness = 693.189999999998
4047 Ai: 15 Gen: 20
4048 Sim Starting
4049 Sim over Total pop = 0 Tick Complete = 307
4050 Fitness = 1083.1799999999885
4051 Ai: 16 Gen: 20
4052 Sim Starting
4053 Sim over Total pop = 0 Tick Complete = 149
4054 Fitness = 961.8799999999964
4055 Ai: 17 Gen: 20
4056 Sim Starting
4057 Sim over Total pop = 0 Tick Complete = 91
4058 Fitness = 920.7099999999996
4059 Ai: 18 Gen: 20
4060 Sim Starting
4061 Sim over Total pop = 0 Tick Complete = 1051
4062 Fitness = 1659.7500000000346
4063 Ai: 19 Gen: 20
4064 Sim Starting
4065 Sim over Total pop = 0 Tick Complete = 162
4066 Fitness = 853.9699999999957
4067 Ai: 20 Gen: 20
4068 Sim Starting
4069 Sim over Total pop = 0 Tick Complete = 355
4070 Fitness = 1896.2799999999993
```

```
4071 Ai: 21 Gen: 20
4072 Sim Starting
4073 Sim over Total pop = 0 Tick Complete = 70
4074 Fitness = 962.0
4075 Ai: 22 Gen: 20
4076 Sim Starting
4077 Sim over Total pop = 0 Tick Complete = 538
4078 Fitness = 788.5799999999899
4079 Ai: 23 Gen: 20
4080 Sim Starting
4081 Sim over Total pop = 0 Tick Complete = 770
4082 Fitness = 957.1099999999998
4083 Ai: 24 Gen: 20
4084 Sim Starting
4085 Sim over Total pop = 0 Tick Complete = 65
4086 Fitness = 229.0199999999955
4087 Ai: 25 Gen: 20
4088 Sim Starting
4089 Sim over Total pop = 0 Tick Complete = 175
4090 Fitness = 269.3399999999947
4091 Ai: 26 Gen: 20
4092 Sim Starting
4093 Sim over Total pop = 0 Tick Complete = 387
4094 Fitness = 1169.9500000000007
4095 Ai: 27 Gen: 20
4096 Sim Starting
4097 Sim over Total pop = 0 Tick Complete = 226
4098 Fitness = 969.1500000000059
4099 Ai: 28 Gen: 20
4100 Sim Starting
4101 Sim over Total pop = 0 Tick Complete = 70
4102 Fitness = 891.0
4103 Ai: 29 Gen: 20
4104 Sim Starting
4105 Sim over Total pop = 0 Tick Complete = 331
4106 Fitness = 1471.8299999999906
4107 Ai: 30 Gen: 20
4108 Sim Starting
4109 Sim over Total pop = 0 Tick Complete = 70
4110 Fitness = 967.0
4111 Ai: 31 Gen: 20
4112 Sim Starting
4113 Sim over Total pop = 0 Tick Complete = 575
4114 Fitness = 1004.1800000000063
```

```
4115 Ai: 32 Gen: 20
4116 Sim Starting
4117 Sim over Total pop = 0 Tick Complete = 120
4118 Fitness = 1027.6799999999985
4119 Ai: 33 Gen: 20
4120 Sim Starting
4121 Sim over Total pop = 0 Tick Complete = 110
4122 Fitness = 953.4099999999905
4123 Ai: 34 Gen: 20
4124 Sim Starting
4125 Sim over Total pop = 0 Tick Complete = 70
4126 Fitness = 748.1099999999999
4127 Ai: 35 Gen: 20
4128 Sim Starting
4129 Sim over Total pop = 0 Tick Complete = 314
4130 Fitness = 1098.199999999992
4131 Ai: 36 Gen: 20
4132 Sim Starting
4133 Sim over Total pop = 0 Tick Complete = 70
4134 Fitness = 835.0
4135 Ai: 37 Gen: 20
4136 Sim Starting
4137 Sim over Total pop = 0 Tick Complete = 623
4138 Fitness = 1862.319999999974
4139 Ai: 38 Gen: 20
4140 Sim Starting
4141 Sim over Total pop = 0 Tick Complete = 562
4142 Fitness = 1572.1099999999926
4143 Ai: 39 Gen: 20
4144 Sim Starting
4145 Sim over Total pop = 0 Tick Complete = 108
4146 Fitness = 118.7499999999885
4147 Ai: 40 Gen: 20
4148 Sim Starting
4149 Sim over Total pop = 0 Tick Complete = 847
4150 Fitness = 2018.650000000015
4151 Ai: 41 Gen: 20
4152 Sim Starting
4153 Sim over Total pop = 0 Tick Complete = 293
4154 Fitness = 1064.0899999999751
4155 Ai: 42 Gen: 20
4156 Sim Starting
4157 Sim over Total pop = 0 Tick Complete = 94
4158 Fitness = 652.7499999999933
```

```
4159 Ai: 43 Gen: 20
4160 Sim Starting
4161 Sim over Total pop = 0 Tick Complete = 70
4162 Fitness = 967.0
4163 Ai: 44 Gen: 20
4164 Sim Starting
4165 Sim over Total pop = 0 Tick Complete = 266
4166 Fitness = 1152.37000000000013
4167 Ai: 45 Gen: 20
4168 Sim Starting
4169 Sim over Total pop = 0 Tick Complete = 581
4170 Fitness = 1327.8499999999763
4171 Ai: 46 Gen: 20
4172 Sim Starting
4173 Sim over Total pop = 0 Tick Complete = 127
4174 Fitness = 273.60999999999194
4175 Ai: 47 Gen: 20
4176 Sim Starting
4177 Sim over Total pop = 0 Tick Complete = 896
4178 Fitness = 1999.3199999999458
4179 Ai: 48 Gen: 20
4180 Sim Starting
4181 Sim over Total pop = 0 Tick Complete = 313
4182 Fitness = 786.7399999999792
4183 Ai: 49 Gen: 20
4184 Sim Starting
4185 Sim over Total pop = 0 Tick Complete = 161
4186 Fitness = 993.420000000001
4187 Mean Fitness of Gen 20 is 966.138999999949 and
    best fitness 2031.149999999949
4188 Ai: 0 Gen: 21
4189 Sim Starting
4190 Sim over Total pop = 0 Tick Complete = 81
4191 Fitness = 627.409999999956
4192 Ai: 1 Gen: 21
4193 Sim Starting
4194 Sim over Total pop = 0 Tick Complete = 65
4195 Fitness = 688.999999999991
4196 Ai: 2 Gen: 21
4197 Sim Starting
4198 Sim over Total pop = 0 Tick Complete = 606
4199 Fitness = 1109.559999999985
4200 Ai: 3 Gen: 21
4201 Sim Starting
```

```
4202 Sim over Total pop = 0 Tick Complete = 163
4203 Fitness = 375.34999999998996
4204 Ai: 4 Gen: 21
4205 Sim Starting
4206 Sim over Total pop = 5 Tick Complete = 2001
4207 Fitness = 2994.229999999985
4208 Ai: 5 Gen: 21
4209 Sim Starting
4210 Sim over Total pop = 0 Tick Complete = 1332
4211 Fitness = 2845.279999999966
4212 Ai: 6 Gen: 21
4213 Sim Starting
4214 Sim over Total pop = 0 Tick Complete = 1065
4215 Fitness = 2460.3700000000836
4216 Ai: 7 Gen: 21
4217 Sim Starting
4218 Sim over Total pop = 0 Tick Complete = 65
4219 Fitness = 106.52999999999753
4220 Ai: 8 Gen: 21
4221 Sim Starting
4222 Sim over Total pop = 0 Tick Complete = 311
4223 Fitness = 962.939999999995
4224 Ai: 9 Gen: 21
4225 Sim Starting
4226 Sim over Total pop = 0 Tick Complete = 823
4227 Fitness = 2370.8999999999323
4228 Ai: 10 Gen: 21
4229 Sim Starting
4230 Sim over Total pop = 0 Tick Complete = 158
4231 Fitness = 1010.6400000000009
4232 Ai: 11 Gen: 21
4233 Sim Starting
4234 Sim over Total pop = 0 Tick Complete = 215
4235 Fitness = 743.919999999986
4236 Ai: 12 Gen: 21
4237 Sim Starting
4238 Sim over Total pop = 0 Tick Complete = 111
4239 Fitness = 716.5699999999838
4240 Ai: 13 Gen: 21
4241 Sim Starting
4242 Sim over Total pop = 0 Tick Complete = 228
4243 Fitness = 1295.3599999999933
4244 Ai: 14 Gen: 21
4245 Sim Starting
```

```
4246 Sim over Total pop = 0 Tick Complete = 153
4247 Fitness = 794.73999999999969
4248 Ai: 15 Gen: 21
4249 Sim Starting
4250 Sim over Total pop = 0 Tick Complete = 805
4251 Fitness = 1844.989999999817
4252 Ai: 16 Gen: 21
4253 Sim Starting
4254 Sim over Total pop = 0 Tick Complete = 265
4255 Fitness = 1263.869999999997
4256 Ai: 17 Gen: 21
4257 Sim Starting
4258 Sim over Total pop = 0 Tick Complete = 70
4259 Fitness = 830.0
4260 Ai: 18 Gen: 21
4261 Sim Starting
4262 Sim over Total pop = 0 Tick Complete = 70
4263 Fitness = 957.0
4264 Ai: 19 Gen: 21
4265 Sim Starting
4266 Sim over Total pop = 0 Tick Complete = 70
4267 Fitness = 759.0
4268 Ai: 20 Gen: 21
4269 Sim Starting
4270 Sim over Total pop = 0 Tick Complete = 159
4271 Fitness = 1153.5899999999972
4272 Ai: 21 Gen: 21
4273 Sim Starting
4274 Sim over Total pop = 0 Tick Complete = 416
4275 Fitness = 1681.4600000000119
4276 Ai: 22 Gen: 21
4277 Sim Starting
4278 Sim over Total pop = 0 Tick Complete = 832
4279 Fitness = 1743.1200000000406
4280 Ai: 23 Gen: 21
4281 Sim Starting
4282 Sim over Total pop = 0 Tick Complete = 270
4283 Fitness = 1435.6699999999982
4284 Ai: 24 Gen: 21
4285 Sim Starting
4286 Sim over Total pop = 0 Tick Complete = 534
4287 Fitness = 1721.0699999999915
4288 Ai: 25 Gen: 21
4289 Sim Starting
```

```
4290 Sim over Total pop = 0 Tick Complete = 574
4291 Fitness = 629.15
4292 Ai: 26 Gen: 21
4293 Sim Starting
4294 Sim over Total pop = 0 Tick Complete = 265
4295 Fitness = 1133.7099999999991
4296 Ai: 27 Gen: 21
4297 Sim Starting
4298 Sim over Total pop = 0 Tick Complete = 150
4299 Fitness = 1140.4299999999982
4300 Ai: 28 Gen: 21
4301 Sim Starting
4302 Sim over Total pop = 0 Tick Complete = 157
4303 Fitness = 1175.3199999999986
4304 Ai: 29 Gen: 21
4305 Sim Starting
4306 Sim over Total pop = 0 Tick Complete = 557
4307 Fitness = 1656.879999999996
4308 Ai: 30 Gen: 21
4309 Sim Starting
4310 Sim over Total pop = 0 Tick Complete = 70
4311 Fitness = 627.0
4312 Ai: 31 Gen: 21
4313 Sim Starting
4314 Sim over Total pop = 0 Tick Complete = 518
4315 Fitness = 1267.129999999942
4316 Ai: 32 Gen: 21
4317 Sim Starting
4318 Sim over Total pop = 0 Tick Complete = 89
4319 Fitness = 661.379999999935
4320 Ai: 33 Gen: 21
4321 Sim Starting
4322 Sim over Total pop = 0 Tick Complete = 181
4323 Fitness = 812.649999999767
4324 Ai: 34 Gen: 21
4325 Sim Starting
4326 Sim over Total pop = 0 Tick Complete = 364
4327 Fitness = 915.439999999928
4328 Ai: 35 Gen: 21
4329 Sim Starting
4330 Sim over Total pop = 0 Tick Complete = 70
4331 Fitness = 764.0
4332 Ai: 36 Gen: 21
4333 Sim Starting
```

```
4334 Sim over Total pop = 0 Tick Complete = 174
4335 Fitness = 740.7200000000031
4336 Ai: 37 Gen: 21
4337 Sim Starting
4338 Sim over Total pop = 0 Tick Complete = 138
4339 Fitness = 961.9099999999929
4340 Ai: 38 Gen: 21
4341 Sim Starting
4342 Sim over Total pop = 0 Tick Complete = 272
4343 Fitness = 1139.9899999999823
4344 Ai: 39 Gen: 21
4345 Sim Starting
4346 Sim over Total pop = 0 Tick Complete = 179
4347 Fitness = 819.4399999999838
4348 Ai: 40 Gen: 21
4349 Sim Starting
4350 Sim over Total pop = 0 Tick Complete = 342
4351 Fitness = 587.749999999955
4352 Ai: 41 Gen: 21
4353 Sim Starting
4354 Sim over Total pop = 0 Tick Complete = 70
4355 Fitness = 288.8599999999907
4356 Ai: 42 Gen: 21
4357 Sim Starting
4358 Sim over Total pop = 0 Tick Complete = 127
4359 Fitness = 485.55999999998465
4360 Ai: 43 Gen: 21
4361 Sim Starting
4362 Sim over Total pop = 0 Tick Complete = 414
4363 Fitness = 1276.6199999999826
4364 Ai: 44 Gen: 21
4365 Sim Starting
4366 Sim over Total pop = 0 Tick Complete = 114
4367 Fitness = 829.8899999999996
4368 Ai: 45 Gen: 21
4369 Sim Starting
4370 Sim over Total pop = 0 Tick Complete = 67
4371 Fitness = 194.6599999999919
4372 Ai: 46 Gen: 21
4373 Sim Starting
4374 Sim over Total pop = 0 Tick Complete = 310
4375 Fitness = 662.7199999999992
4376 Mean Fitness of Gen 21 is 1090.7187234042462 and
best fitness 2994.229999999985
```

```
4377 Ai: 0 Gen: 22
4378 Sim Starting
4379 Sim over Total pop = 0 Tick Complete = 323
4380 Fitness = 675.2999999999976
4381 Ai: 1 Gen: 22
4382 Sim Starting
4383 Sim over Total pop = 0 Tick Complete = 126
4384 Fitness = 284.54999999999524
4385 Ai: 2 Gen: 22
4386 Sim Starting
4387 Sim over Total pop = 0 Tick Complete = 70
4388 Fitness = 901.0
4389 Ai: 3 Gen: 22
4390 Sim Starting
4391 Sim over Total pop = 0 Tick Complete = 176
4392 Fitness = 1048.6299999999824
4393 Ai: 4 Gen: 22
4394 Sim Starting
4395 Sim over Total pop = 0 Tick Complete = 548
4396 Fitness = 1995.8199999999417
4397 Ai: 5 Gen: 22
4398 Sim Starting
4399 Sim over Total pop = 0 Tick Complete = 124
4400 Fitness = 885.4000000000007
4401 Ai: 6 Gen: 22
4402 Sim Starting
4403 Sim over Total pop = 0 Tick Complete = 118
4404 Fitness = 788.1299999999977
4405 Ai: 7 Gen: 22
4406 Sim Starting
4407 Sim over Total pop = 0 Tick Complete = 1370
4408 Fitness = 2378.739999999985
4409 Ai: 8 Gen: 22
4410 Sim Starting
4411 Sim over Total pop = 2 Tick Complete = 2001
4412 Fitness = 2897.7599999998715
4413 Ai: 9 Gen: 22
4414 Sim Starting
4415 Sim over Total pop = 0 Tick Complete = 106
4416 Fitness = 728.739999999994
4417 Ai: 10 Gen: 22
4418 Sim Starting
4419 Sim over Total pop = 0 Tick Complete = 436
4420 Fitness = 1167.3999999999864
```

```
4421 Ai: 11 Gen: 22
4422 Sim Starting
4423 Sim over Total pop = 0 Tick Complete = 195
4424 Fitness = 1246.6099999999938
4425 Ai: 12 Gen: 22
4426 Sim Starting
4427 Sim over Total pop = 0 Tick Complete = 128
4428 Fitness = 735.1199999999999
4429 Ai: 13 Gen: 22
4430 Sim Starting
4431 Sim over Total pop = 0 Tick Complete = 154
4432 Fitness = 868.4100000000029
4433 Ai: 14 Gen: 22
4434 Sim Starting
4435 Sim over Total pop = 0 Tick Complete = 79
4436 Fitness = 914.8499999999968
4437 Ai: 15 Gen: 22
4438 Sim Starting
4439 Sim over Total pop = 0 Tick Complete = 831
4440 Fitness = 1252.0500000000134
4441 Ai: 16 Gen: 22
4442 Sim Starting
4443 Sim over Total pop = 0 Tick Complete = 516
4444 Fitness = 1346.0999999999915
4445 Ai: 17 Gen: 22
4446 Sim Starting
4447 Sim over Total pop = 0 Tick Complete = 70
4448 Fitness = 759.0
4449 Ai: 18 Gen: 22
4450 Sim Starting
4451 Sim over Total pop = 0 Tick Complete = 286
4452 Fitness = 1339.8399999999865
4453 Ai: 19 Gen: 22
4454 Sim Starting
4455 Sim over Total pop = 0 Tick Complete = 70
4456 Fitness = 967.0
4457 Ai: 20 Gen: 22
4458 Sim Starting
4459 Sim over Total pop = 0 Tick Complete = 70
4460 Fitness = 825.0
4461 Ai: 21 Gen: 22
4462 Sim Starting
4463 Sim over Total pop = 0 Tick Complete = 70
4464 Fitness = 967.0
```

```
4465 Ai: 22 Gen: 22
4466 Sim Starting
4467 Sim over Total pop = 0 Tick Complete = 164
4468 Fitness = 732.5199999999985
4469 Ai: 23 Gen: 22
4470 Sim Starting
4471 Sim over Total pop = 0 Tick Complete = 453
4472 Fitness = 1383.9499999999855
4473 Ai: 24 Gen: 22
4474 Sim Starting
4475 Sim over Total pop = 0 Tick Complete = 157
4476 Fitness = 811.2899999999968
4477 Ai: 25 Gen: 22
4478 Sim Starting
4479 Sim over Total pop = 0 Tick Complete = 446
4480 Fitness = 1178.319999999976
4481 Ai: 26 Gen: 22
4482 Sim Starting
4483 Sim over Total pop = 0 Tick Complete = 201
4484 Fitness = 600.6299999999999
4485 Ai: 27 Gen: 22
4486 Sim Starting
4487 Sim over Total pop = 0 Tick Complete = 70
4488 Fitness = 901.0
4489 Ai: 28 Gen: 22
4490 Sim Starting
4491 Sim over Total pop = 0 Tick Complete = 452
4492 Fitness = 1298.1099999999435
4493 Ai: 29 Gen: 22
4494 Sim Starting
4495 Sim over Total pop = 0 Tick Complete = 367
4496 Fitness = 1368.0199999999775
4497 Ai: 30 Gen: 22
4498 Sim Starting
4499 Sim over Total pop = 0 Tick Complete = 64
4500 Fitness = 569.0299999999924
4501 Ai: 31 Gen: 22
4502 Sim Starting
4503 Sim over Total pop = 0 Tick Complete = 415
4504 Fitness = 1082.7699999999888
4505 Ai: 32 Gen: 22
4506 Sim Starting
4507 Sim over Total pop = 0 Tick Complete = 522
4508 Fitness = 1911.729999999994
```

```
4509 Ai: 33 Gen: 22
4510 Sim Starting
4511 Sim over Total pop = 0 Tick Complete = 299
4512 Fitness = 1170.2399999999852
4513 Ai: 34 Gen: 22
4514 Sim Starting
4515 Sim over Total pop = 0 Tick Complete = 70
4516 Fitness = 891.0
4517 Ai: 35 Gen: 22
4518 Sim Starting
4519 Sim over Total pop = 0 Tick Complete = 340
4520 Fitness = 1055.3199999999765
4521 Ai: 36 Gen: 22
4522 Sim Starting
4523 Sim over Total pop = 0 Tick Complete = 84
4524 Fitness = 671.6899999999891
4525 Ai: 37 Gen: 22
4526 Sim Starting
4527 Sim over Total pop = 0 Tick Complete = 114
4528 Fitness = 121.4699999999973
4529 Ai: 38 Gen: 22
4530 Sim Starting
4531 Sim over Total pop = 0 Tick Complete = 89
4532 Fitness = 216.1299999999948
4533 Ai: 39 Gen: 22
4534 Sim Starting
4535 Sim over Total pop = 0 Tick Complete = 1048
4536 Fitness = 1729.599999999987
4537 Ai: 40 Gen: 22
4538 Sim Starting
4539 Sim over Total pop = 0 Tick Complete = 733
4540 Fitness = 1287.1099999999738
4541 Ai: 41 Gen: 22
4542 Sim Starting
4543 Sim over Total pop = 0 Tick Complete = 483
4544 Fitness = 1386.770000000001
4545 Ai: 42 Gen: 22
4546 Sim Starting
4547 Sim over Total pop = 0 Tick Complete = 131
4548 Fitness = 938.3199999999927
4549 Ai: 43 Gen: 22
4550 Sim Starting
4551 Sim over Total pop = 0 Tick Complete = 1443
4552 Fitness = 2641.2400000001053
```

```
4553 Ai: 44 Gen: 22
4554 Sim Starting
4555 Sim over Total pop = 0 Tick Complete = 65
4556 Fitness = 137.03999999999675
4557 Ai: 45 Gen: 22
4558 Sim Starting
4559 Sim over Total pop = 0 Tick Complete = 261
4560 Fitness = 800.5999999999789
4561 Ai: 46 Gen: 22
4562 Sim Starting
4563 Sim over Total pop = 0 Tick Complete = 158
4564 Fitness = 740.4899999999844
4565 Mean Fitness of Gen 22 is 1076.5285106382883 and
best fitness 2897.7599999998715
4566 Ai: 0 Gen: 23
4567 Sim Starting
4568 Sim over Total pop = 0 Tick Complete = 70
4569 Fitness = 901.0
4570 Ai: 1 Gen: 23
4571 Sim Starting
4572 Sim over Total pop = 0 Tick Complete = 70
4573 Fitness = 962.0
4574 Ai: 2 Gen: 23
4575 Sim Starting
4576 Sim over Total pop = 0 Tick Complete = 195
4577 Fitness = 971.2999999999963
4578 Ai: 3 Gen: 23
4579 Sim Starting
4580 Sim over Total pop = 0 Tick Complete = 402
4581 Fitness = 1008.3800000000003
4582 Ai: 4 Gen: 23
4583 Sim Starting
4584 Sim over Total pop = 0 Tick Complete = 1268
4585 Fitness = 1843.0599999999572
4586 Ai: 5 Gen: 23
4587 Sim Starting
4588 Sim over Total pop = 0 Tick Complete = 67
4589 Fitness = 493.96999999999014
4590 Ai: 6 Gen: 23
4591 Sim Starting
4592 Sim over Total pop = 0 Tick Complete = 132
4593 Fitness = 930.8699999999994
4594 Ai: 7 Gen: 23
4595 Sim Starting
```

```
4596 Sim over Total pop = 0 Tick Complete = 500
4597 Fitness = 1124.8099999999909
4598 Ai: 8 Gen: 23
4599 Sim Starting
4600 Sim over Total pop = 0 Tick Complete = 256
4601 Fitness = 376.5199999999964
4602 Ai: 9 Gen: 23
4603 Sim Starting
4604 Sim over Total pop = 0 Tick Complete = 397
4605 Fitness = 1619.0899999999626
4606 Ai: 10 Gen: 23
4607 Sim Starting
4608 Sim over Total pop = 0 Tick Complete = 70
4609 Fitness = 901.0
4610 Ai: 11 Gen: 23
4611 Sim Starting
4612 Sim over Total pop = 0 Tick Complete = 70
4613 Fitness = 759.0
4614 Ai: 12 Gen: 23
4615 Sim Starting
4616 Sim over Total pop = 0 Tick Complete = 70
4617 Fitness = 627.0
4618 Ai: 13 Gen: 23
4619 Sim Starting
4620 Sim over Total pop = 0 Tick Complete = 249
4621 Fitness = 793.1099999999988
4622 Ai: 14 Gen: 23
4623 Sim Starting
4624 Sim over Total pop = 0 Tick Complete = 1392
4625 Fitness = 2114.659999999998
4626 Ai: 15 Gen: 23
4627 Sim Starting
4628 Sim over Total pop = 0 Tick Complete = 751
4629 Fitness = 2324.6399999999658
4630 Ai: 16 Gen: 23
4631 Sim Starting
4632 Sim over Total pop = 0 Tick Complete = 125
4633 Fitness = 895.6199999999972
4634 Ai: 17 Gen: 23
4635 Sim Starting
4636 Sim over Total pop = 0 Tick Complete = 488
4637 Fitness = 1125.1899999999972
4638 Ai: 18 Gen: 23
4639 Sim Starting
```

```
4640 Sim over Total pop = 0 Tick Complete = 85
4641 Fitness = 557.6399999999863
4642 Ai: 19 Gen: 23
4643 Sim Starting
4644 Sim over Total pop = 0 Tick Complete = 204
4645 Fitness = 811.8499999999874
4646 Ai: 20 Gen: 23
4647 Sim Starting
4648 Sim over Total pop = 0 Tick Complete = 161
4649 Fitness = 848.4999999999842
4650 Ai: 21 Gen: 23
4651 Sim Starting
4652 Sim over Total pop = 0 Tick Complete = 318
4653 Fitness = 755.7299999999652
4654 Ai: 22 Gen: 23
4655 Sim Starting
4656 Sim over Total pop = 0 Tick Complete = 329
4657 Fitness = 910.9799999999855
4658 Ai: 23 Gen: 23
4659 Sim Starting
4660 Sim over Total pop = 0 Tick Complete = 202
4661 Fitness = 799.9099999999752
4662 Ai: 24 Gen: 23
4663 Sim Starting
4664 Sim over Total pop = 0 Tick Complete = 624
4665 Fitness = 961.0200000000069
4666 Ai: 25 Gen: 23
4667 Sim Starting
4668 Sim over Total pop = 0 Tick Complete = 1078
4669 Fitness = 1817.4399999999705
4670 Ai: 26 Gen: 23
4671 Sim Starting
4672 Sim over Total pop = 0 Tick Complete = 63
4673 Fitness = 113.75999999999823
4674 Ai: 27 Gen: 23
4675 Sim Starting
4676 Sim over Total pop = 0 Tick Complete = 505
4677 Fitness = 1025.299999999986
4678 Ai: 28 Gen: 23
4679 Sim Starting
4680 Sim over Total pop = 0 Tick Complete = 123
4681 Fitness = 1065.3599999999933
4682 Ai: 29 Gen: 23
4683 Sim Starting
```

```
4684 Sim over Total pop = 0 Tick Complete = 120
4685 Fitness = 955.969999999999
4686 Ai: 30 Gen: 23
4687 Sim Starting
4688 Sim over Total pop = 0 Tick Complete = 70
4689 Fitness = 759.0
4690 Ai: 31 Gen: 23
4691 Sim Starting
4692 Sim over Total pop = 0 Tick Complete = 213
4693 Fitness = 1291.7600000000095
4694 Ai: 32 Gen: 23
4695 Sim Starting
4696 Sim over Total pop = 0 Tick Complete = 378
4697 Fitness = 951.449999999828
4698 Ai: 33 Gen: 23
4699 Sim Starting
4700 Sim over Total pop = 0 Tick Complete = 1097
4701 Fitness = 1711.6299999999808
4702 Ai: 34 Gen: 23
4703 Sim Starting
4704 Sim over Total pop = 0 Tick Complete = 70
4705 Fitness = 891.0
4706 Ai: 35 Gen: 23
4707 Sim Starting
4708 Sim over Total pop = 0 Tick Complete = 221
4709 Fitness = 364.5699999999958
4710 Ai: 36 Gen: 23
4711 Sim Starting
4712 Sim over Total pop = 0 Tick Complete = 70
4713 Fitness = 759.0
4714 Ai: 37 Gen: 23
4715 Sim Starting
4716 Sim over Total pop = 0 Tick Complete = 190
4717 Fitness = 1280.1599999999962
4718 Ai: 38 Gen: 23
4719 Sim Starting
4720 Sim over Total pop = 0 Tick Complete = 193
4721 Fitness = 1033.8799999999942
4722 Ai: 39 Gen: 23
4723 Sim Starting
4724 Sim over Total pop = 0 Tick Complete = 204
4725 Fitness = 839.0599999999905
4726 Ai: 40 Gen: 23
4727 Sim Starting
```

```
4728 Sim over Total pop = 0 Tick Complete = 200
4729 Fitness = 849.6900000000021
4730 Ai: 41 Gen: 23
4731 Sim Starting
4732 Sim over Total pop = 0 Tick Complete = 234
4733 Fitness = 976.1099999999931
4734 Ai: 42 Gen: 23
4735 Sim Starting
4736 Sim over Total pop = 0 Tick Complete = 105
4737 Fitness = 571.5499999999896
4738 Ai: 43 Gen: 23
4739 Sim Starting
4740 Sim over Total pop = 0 Tick Complete = 212
4741 Fitness = 1004.1499999999935
4742 Ai: 44 Gen: 23
4743 Sim Starting
4744 Sim over Total pop = 0 Tick Complete = 246
4745 Fitness = 898.7799999999947
4746 Ai: 45 Gen: 23
4747 Sim Starting
4748 Sim over Total pop = 0 Tick Complete = 104
4749 Fitness = 708.6799999999914
4750 Ai: 46 Gen: 23
4751 Sim Starting
4752 Sim over Total pop = 0 Tick Complete = 70
4753 Fitness = 1089.0
4754 Ai: 47 Gen: 23
4755 Sim Starting
4756 Sim over Total pop = 0 Tick Complete = 245
4757 Fitness = 1346.2199999999968
4758 Ai: 48 Gen: 23
4759 Sim Starting
4760 Sim over Total pop = 0 Tick Complete = 162
4761 Fitness = 620.2799999999942
4762 Mean Fitness of Gen 23 is 986.543877551011 and
    best fitness 2324.6399999999658
4763 Ai: 0 Gen: 24
4764 Sim Starting
4765 Sim over Total pop = 0 Tick Complete = 69
4766 Fitness = 285.61999999999716
4767 Ai: 1 Gen: 24
4768 Sim Starting
4769 Sim over Total pop = 0 Tick Complete = 674
4770 Fitness = 1560.6899999999971
```

```
4771 Ai: 2 Gen: 24
4772 Sim Starting
4773 Sim over Total pop = 0 Tick Complete = 391
4774 Fitness = 1810.0999999999688
4775 Ai: 3 Gen: 24
4776 Sim Starting
4777 Sim over Total pop = 0 Tick Complete = 117
4778 Fitness = 310.7099999999844
4779 Ai: 4 Gen: 24
4780 Sim Starting
4781 Sim over Total pop = 0 Tick Complete = 70
4782 Fitness = 891.0
4783 Ai: 5 Gen: 24
4784 Sim Starting
4785 Sim over Total pop = 0 Tick Complete = 70
4786 Fitness = 693.0
4787 Ai: 6 Gen: 24
4788 Sim Starting
4789 Sim over Total pop = 0 Tick Complete = 430
4790 Fitness = 1404.4399999999969
4791 Ai: 7 Gen: 24
4792 Sim Starting
4793 Sim over Total pop = 0 Tick Complete = 299
4794 Fitness = 842.6299999999916
4795 Ai: 8 Gen: 24
4796 Sim Starting
4797 Sim over Total pop = 0 Tick Complete = 252
4798 Fitness = 1469.9099999999828
4799 Ai: 9 Gen: 24
4800 Sim Starting
4801 Sim over Total pop = 0 Tick Complete = 423
4802 Fitness = 1161.5500000000007
4803 Ai: 10 Gen: 24
4804 Sim Starting
4805 Sim over Total pop = 0 Tick Complete = 637
4806 Fitness = 1240.4099999999944
4807 Ai: 11 Gen: 24
4808 Sim Starting
4809 Sim over Total pop = 0 Tick Complete = 227
4810 Fitness = 1209.3099999999881
4811 Ai: 12 Gen: 24
4812 Sim Starting
4813 Sim over Total pop = 0 Tick Complete = 155
4814 Fitness = 968.1799999999935
```

```
4815 Ai: 13 Gen: 24
4816 Sim Starting
4817 Sim over Total pop = 0 Tick Complete = 446
4818 Fitness = 1288.9499999999734
4819 Ai: 14 Gen: 24
4820 Sim Starting
4821 Sim over Total pop = 0 Tick Complete = 69
4822 Fitness = 36.96999999995125
4823 Ai: 15 Gen: 24
4824 Sim Starting
4825 Sim over Total pop = 0 Tick Complete = 77
4826 Fitness = 243.4599999999921
4827 Ai: 16 Gen: 24
4828 Sim Starting
4829 Sim over Total pop = 0 Tick Complete = 742
4830 Fitness = 2368.60999999996
4831 Ai: 17 Gen: 24
4832 Sim Starting
4833 Sim over Total pop = 0 Tick Complete = 244
4834 Fitness = 1249.169999999996
4835 Ai: 18 Gen: 24
4836 Sim Starting
4837 Sim over Total pop = 0 Tick Complete = 205
4838 Fitness = 1003.109999999995
4839 Ai: 19 Gen: 24
4840 Sim Starting
4841 Sim over Total pop = 0 Tick Complete = 176
4842 Fitness = 758.2799999999937
4843 Ai: 20 Gen: 24
4844 Sim Starting
4845 Sim over Total pop = 0 Tick Complete = 649
4846 Fitness = 1573.2199999999914
4847 Ai: 21 Gen: 24
4848 Sim Starting
4849 Sim over Total pop = 0 Tick Complete = 207
4850 Fitness = 881.3599999999961
4851 Ai: 22 Gen: 24
4852 Sim Starting
4853 Sim over Total pop = 0 Tick Complete = 159
4854 Fitness = 750.25999999999828
4855 Ai: 23 Gen: 24
4856 Sim Starting
4857 Sim over Total pop = 0 Tick Complete = 70
4858 Fitness = 906.0
```

```
4859 Ai: 24 Gen: 24
4860 Sim Starting
4861 Sim over Total pop = 0 Tick Complete = 337
4862 Fitness = 1356.5899999999751
4863 Ai: 25 Gen: 24
4864 Sim Starting
4865 Sim over Total pop = 0 Tick Complete = 88
4866 Fitness = 836.3500000000007
4867 Ai: 26 Gen: 24
4868 Sim Starting
4869 Sim over Total pop = 0 Tick Complete = 84
4870 Fitness = 678.3599999999907
4871 Ai: 27 Gen: 24
4872 Sim Starting
4873 Sim over Total pop = 0 Tick Complete = 70
4874 Fitness = 962.0
4875 Ai: 28 Gen: 24
4876 Sim Starting
4877 Sim over Total pop = 0 Tick Complete = 259
4878 Fitness = 1213.3099999999883
4879 Ai: 29 Gen: 24
4880 Sim Starting
4881 Sim over Total pop = 0 Tick Complete = 407
4882 Fitness = 1248.1299999999826
4883 Ai: 30 Gen: 24
4884 Sim Starting
4885 Sim over Total pop = 0 Tick Complete = 69
4886 Fitness = 711.0899999999981
4887 Ai: 31 Gen: 24
4888 Sim Starting
4889 Sim over Total pop = 0 Tick Complete = 202
4890 Fitness = 276.77999999999815
4891 Ai: 32 Gen: 24
4892 Sim Starting
4893 Sim over Total pop = 0 Tick Complete = 505
4894 Fitness = 878.4199999999893
4895 Ai: 33 Gen: 24
4896 Sim Starting
4897 Sim over Total pop = 0 Tick Complete = 753
4898 Fitness = 941.8799999999982
4899 Ai: 34 Gen: 24
4900 Sim Starting
4901 Sim over Total pop = 0 Tick Complete = 70
4902 Fitness = 896.0
```

```
4903 Ai: 35 Gen: 24
4904 Sim Starting
4905 Sim over Total pop = 0 Tick Complete = 70
4906 Fitness = 759.0
4907 Ai: 36 Gen: 24
4908 Sim Starting
4909 Sim over Total pop = 0 Tick Complete = 64
4910 Fitness = 175.77999999999528
4911 Ai: 37 Gen: 24
4912 Sim Starting
4913 Sim over Total pop = 0 Tick Complete = 572
4914 Fitness = 1219.6499999999487
4915 Ai: 38 Gen: 24
4916 Sim Starting
4917 Sim over Total pop = 0 Tick Complete = 385
4918 Fitness = 1556.6699999999848
4919 Ai: 39 Gen: 24
4920 Sim Starting
4921 Sim over Total pop = 0 Tick Complete = 437
4922 Fitness = 1290.7600000000004
4923 Ai: 40 Gen: 24
4924 Sim Starting
4925 Sim over Total pop = 0 Tick Complete = 279
4926 Fitness = 974.7399999999935
4927 Ai: 41 Gen: 24
4928 Sim Starting
4929 Sim over Total pop = 0 Tick Complete = 224
4930 Fitness = 1277.9700000000032
4931 Ai: 42 Gen: 24
4932 Sim Starting
4933 Sim over Total pop = 0 Tick Complete = 460
4934 Fitness = 1789.5099999999861
4935 Ai: 43 Gen: 24
4936 Sim Starting
4937 Sim over Total pop = 0 Tick Complete = 339
4938 Fitness = 1693.199999999994
4939 Ai: 44 Gen: 24
4940 Sim Starting
4941 Sim over Total pop = 0 Tick Complete = 371
4942 Fitness = 1170.9499999999778
4943 Ai: 45 Gen: 24
4944 Sim Starting
4945 Sim over Total pop = 0 Tick Complete = 273
4946 Fitness = 1107.6699999999981
```

```
4947 Ai: 46 Gen: 24
4948 Sim Starting
4949 Sim over Total pop = 0 Tick Complete = 84
4950 Fitness = 519.8299999999996
4951 Mean Fitness of Gen 24 is 1030.6719148936072 and
    best fitness 2368.60999999996
4952 Ai: 0 Gen: 25
4953 Sim Starting
4954 Sim over Total pop = 0 Tick Complete = 62
4955 Fitness = 110.0899999999977
4956 Ai: 1 Gen: 25
4957 Sim Starting
4958 Sim over Total pop = 0 Tick Complete = 70
4959 Fitness = 830.0
4960 Ai: 2 Gen: 25
4961 Sim Starting
4962 Sim over Total pop = 0 Tick Complete = 260
4963 Fitness = 854.2500000000023
4964 Ai: 3 Gen: 25
4965 Sim Starting
4966 Sim over Total pop = 0 Tick Complete = 599
4967 Fitness = 1952.9700000000375
4968 Ai: 4 Gen: 25
4969 Sim Starting
4970 Sim over Total pop = 0 Tick Complete = 239
4971 Fitness = 908.3699999999951
4972 Ai: 5 Gen: 25
4973 Sim Starting
4974 Sim over Total pop = 0 Tick Complete = 217
4975 Fitness = 1105.8899999999953
4976 Ai: 6 Gen: 25
4977 Sim Starting
4978 Sim over Total pop = 0 Tick Complete = 111
4979 Fitness = 796.2099999999986
4980 Ai: 7 Gen: 25
4981 Sim Starting
4982 Sim over Total pop = 0 Tick Complete = 413
4983 Fitness = 1607.2400000000017
4984 Ai: 8 Gen: 25
4985 Sim Starting
4986 Sim over Total pop = 0 Tick Complete = 632
4987 Fitness = 1924.8799999999555
4988 Ai: 9 Gen: 25
4989 Sim Starting
```

```
4990 Sim over Total pop = 0 Tick Complete = 151
4991 Fitness = 927.2599999999904
4992 Ai: 10 Gen: 25
4993 Sim Starting
4994 Sim over Total pop = 0 Tick Complete = 213
4995 Fitness = 969.5999999999771
4996 Ai: 11 Gen: 25
4997 Sim Starting
4998 Sim over Total pop = 0 Tick Complete = 476
4999 Fitness = 1400.1899999999766
5000 Ai: 12 Gen: 25
5001 Sim Starting
5002 Sim over Total pop = 0 Tick Complete = 1278
5003 Fitness = 2201.679999999985
5004 Ai: 13 Gen: 25
5005 Sim Starting
5006 Sim over Total pop = 0 Tick Complete = 206
5007 Fitness = 1469.1799999999798
5008 Ai: 14 Gen: 25
5009 Sim Starting
5010 Sim over Total pop = 0 Tick Complete = 273
5011 Fitness = 1390.959999999982
5012 Ai: 15 Gen: 25
5013 Sim Starting
5014 Sim over Total pop = 0 Tick Complete = 70
5015 Fitness = 967.0
5016 Ai: 16 Gen: 25
5017 Sim Starting
5018 Sim over Total pop = 0 Tick Complete = 70
5019 Fitness = 769.0
5020 Ai: 17 Gen: 25
5021 Sim Starting
5022 Sim over Total pop = 0 Tick Complete = 70
5023 Fitness = 972.0
5024 Ai: 18 Gen: 25
5025 Sim Starting
5026 Sim over Total pop = 0 Tick Complete = 70
5027 Fitness = 901.0
5028 Ai: 19 Gen: 25
5029 Sim Starting
5030 Sim over Total pop = 0 Tick Complete = 666
5031 Fitness = 1606.1000000000154
5032 Ai: 20 Gen: 25
5033 Sim Starting
```

```
5034 Sim over Total pop = 0 Tick Complete = 84
5035 Fitness = 465.56999999999476
5036 Ai: 21 Gen: 25
5037 Sim Starting
5038 Sim over Total pop = 0 Tick Complete = 124
5039 Fitness = 834.6199999999949
5040 Ai: 22 Gen: 25
5041 Sim Starting
5042 Sim over Total pop = 0 Tick Complete = 302
5043 Fitness = 995.1999999999916
5044 Ai: 23 Gen: 25
5045 Sim Starting
5046 Sim over Total pop = 0 Tick Complete = 148
5047 Fitness = 392.43999999999215
5048 Ai: 24 Gen: 25
5049 Sim Starting
5050 Sim over Total pop = 0 Tick Complete = 191
5051 Fitness = 1069.149999999994
5052 Ai: 25 Gen: 25
5053 Sim Starting
5054 Sim over Total pop = 0 Tick Complete = 321
5055 Fitness = 1104.549999999981
5056 Ai: 26 Gen: 25
5057 Sim Starting
5058 Sim over Total pop = 0 Tick Complete = 140
5059 Fitness = 947.3999999999904
5060 Ai: 27 Gen: 25
5061 Sim Starting
5062 Sim over Total pop = 0 Tick Complete = 153
5063 Fitness = 1174.8799999999883
5064 Ai: 28 Gen: 25
5065 Sim Starting
5066 Sim over Total pop = 0 Tick Complete = 273
5067 Fitness = 1502.610000000008
5068 Ai: 29 Gen: 25
5069 Sim Starting
5070 Sim over Total pop = 0 Tick Complete = 120
5071 Fitness = 820.729999999996
5072 Ai: 30 Gen: 25
5073 Sim Starting
5074 Sim over Total pop = 0 Tick Complete = 147
5075 Fitness = 994.6099999999915
5076 Ai: 31 Gen: 25
5077 Sim Starting
```

```
5078 Sim over Total pop = 0 Tick Complete = 202
5079 Fitness = 1546.0599999999833
5080 Ai: 32 Gen: 25
5081 Sim Starting
5082 Sim over Total pop = 0 Tick Complete = 100
5083 Fitness = 935.8199999999995
5084 Ai: 33 Gen: 25
5085 Sim Starting
5086 Sim over Total pop = 0 Tick Complete = 358
5087 Fitness = 964.6999999999839
5088 Ai: 34 Gen: 25
5089 Sim Starting
5090 Sim over Total pop = 0 Tick Complete = 212
5091 Fitness = 1171.0999999999906
5092 Ai: 35 Gen: 25
5093 Sim Starting
5094 Sim over Total pop = 0 Tick Complete = 537
5095 Fitness = 946.1999999999564
5096 Ai: 36 Gen: 25
5097 Sim Starting
5098 Sim over Total pop = 0 Tick Complete = 70
5099 Fitness = 693.0
5100 Ai: 37 Gen: 25
5101 Sim Starting
5102 Sim over Total pop = 2 Tick Complete = 2001
5103 Fitness = 2794.999999999845
5104 Ai: 38 Gen: 25
5105 Sim Starting
5106 Sim over Total pop = 0 Tick Complete = 1480
5107 Fitness = 3327.9500000002945
5108 Ai: 39 Gen: 25
5109 Sim Starting
5110 Sim over Total pop = 0 Tick Complete = 127
5111 Fitness = 569.3799999999827
5112 Ai: 40 Gen: 25
5113 Sim Starting
5114 Sim over Total pop = 0 Tick Complete = 682
5115 Fitness = 2450.3000000000357
5116 Ai: 41 Gen: 25
5117 Sim Starting
5118 Sim over Total pop = 0 Tick Complete = 71
5119 Fitness = 163.42999999998995
5120 Ai: 42 Gen: 25
5121 Sim Starting
```

```
5122 Sim over Total pop = 0 Tick Complete = 106
5123 Fitness = 216.92999999998756
5124 Ai: 43 Gen: 25
5125 Sim Starting
5126 Sim over Total pop = 0 Tick Complete = 1936
5127 Fitness = 2701.6699999999823
5128 Ai: 44 Gen: 25
5129 Sim Starting
5130 Sim over Total pop = 0 Tick Complete = 143
5131 Fitness = 679.1399999999921
5132 Ai: 45 Gen: 25
5133 Sim Starting
5134 Sim over Total pop = 0 Tick Complete = 740
5135 Fitness = 1091.4199999999273
5136 Ai: 46 Gen: 25
5137 Sim Starting
5138 Sim over Total pop = 0 Tick Complete = 659
5139 Fitness = 1020.1899999999923
5140 Ai: 47 Gen: 25
5141 Sim Starting
5142 Sim over Total pop = 0 Tick Complete = 679
5143 Fitness = 1889.2999999999606
5144 Mean Fitness of Gen 25 is 1190.150416666612 and
    best fitness 3327.9500000002945
5145 Ai: 0 Gen: 26
5146 Sim Starting
5147 Sim over Total pop = 0 Tick Complete = 70
5148 Fitness = 764.0
5149 Ai: 1 Gen: 26
5150 Sim Starting
5151 Sim over Total pop = 0 Tick Complete = 192
5152 Fitness = 829.169999999992
5153 Ai: 2 Gen: 26
5154 Sim Starting
5155 Sim over Total pop = 0 Tick Complete = 109
5156 Fitness = 909.839999999999
5157 Ai: 3 Gen: 26
5158 Sim Starting
5159 Sim over Total pop = 0 Tick Complete = 175
5160 Fitness = 878.9099999999949
5161 Ai: 4 Gen: 26
5162 Sim Starting
5163 Sim over Total pop = 0 Tick Complete = 275
5164 Fitness = 1163.6600000000008
```

```
5165 Ai: 5 Gen: 26
5166 Sim Starting
5167 Sim over Total pop = 0 Tick Complete = 70
5168 Fitness = 896.0
5169 Ai: 6 Gen: 26
5170 Sim Starting
5171 Sim over Total pop = 4 Tick Complete = 2001
5172 Fitness = 2846.4099999999717
5173 Ai: 7 Gen: 26
5174 Sim Starting
5175 Sim over Total pop = 0 Tick Complete = 356
5176 Fitness = 883.9899999999743
5177 Ai: 8 Gen: 26
5178 Sim Starting
5179 Sim over Total pop = 0 Tick Complete = 256
5180 Fitness = 879.0199999999927
5181 Ai: 9 Gen: 26
5182 Sim Starting
5183 Sim over Total pop = 0 Tick Complete = 243
5184 Fitness = 1001.4199999999933
5185 Ai: 10 Gen: 26
5186 Sim Starting
5187 Sim over Total pop = 0 Tick Complete = 176
5188 Fitness = 798.1799999999937
5189 Ai: 11 Gen: 26
5190 Sim Starting
5191 Sim over Total pop = 0 Tick Complete = 195
5192 Fitness = 770.0399999999917
5193 Ai: 12 Gen: 26
5194 Sim Starting
5195 Sim over Total pop = 0 Tick Complete = 151
5196 Fitness = 740.6899999999833
5197 Ai: 13 Gen: 26
5198 Sim Starting
5199 Sim over Total pop = 0 Tick Complete = 357
5200 Fitness = 841.9799999999912
5201 Ai: 14 Gen: 26
5202 Sim Starting
5203 Sim over Total pop = 0 Tick Complete = 75
5204 Fitness = 1031.5299999999997
5205 Ai: 15 Gen: 26
5206 Sim Starting
5207 Sim over Total pop = 0 Tick Complete = 197
5208 Fitness = 972.0299999999979
```

```
5209 Ai: 16 Gen: 26
5210 Sim Starting
5211 Sim over Total pop = 0 Tick Complete = 70
5212 Fitness = 698.0
5213 Ai: 17 Gen: 26
5214 Sim Starting
5215 Sim over Total pop = 0 Tick Complete = 77
5216 Fitness = 940.0299999999997
5217 Ai: 18 Gen: 26
5218 Sim Starting
5219 Sim over Total pop = 0 Tick Complete = 70
5220 Fitness = 825.0
5221 Ai: 19 Gen: 26
5222 Sim Starting
5223 Sim over Total pop = 0 Tick Complete = 374
5224 Fitness = 1361.0299999999656
5225 Ai: 20 Gen: 26
5226 Sim Starting
5227 Sim over Total pop = 0 Tick Complete = 237
5228 Fitness = 1062.5099999999927
5229 Ai: 21 Gen: 26
5230 Sim Starting
5231 Sim over Total pop = 0 Tick Complete = 72
5232 Fitness = 772.099999999998
5233 Ai: 22 Gen: 26
5234 Sim Starting
5235 Sim over Total pop = 0 Tick Complete = 70
5236 Fitness = 835.0
5237 Ai: 23 Gen: 26
5238 Sim Starting
5239 Sim over Total pop = 0 Tick Complete = 708
5240 Fitness = 1390.5099999999698
5241 Ai: 24 Gen: 26
5242 Sim Starting
5243 Sim over Total pop = 0 Tick Complete = 183
5244 Fitness = 944.2500000000033
5245 Ai: 25 Gen: 26
5246 Sim Starting
5247 Sim over Total pop = 0 Tick Complete = 70
5248 Fitness = 891.0
5249 Ai: 26 Gen: 26
5250 Sim Starting
5251 Sim over Total pop = 0 Tick Complete = 376
5252 Fitness = 1690.5499999999604
```

```
5253 Ai: 27 Gen: 26
5254 Sim Starting
5255 Sim over Total pop = 0 Tick Complete = 70
5256 Fitness = 764.0
5257 Ai: 28 Gen: 26
5258 Sim Starting
5259 Sim over Total pop = 0 Tick Complete = 70
5260 Fitness = 627.0
5261 Ai: 29 Gen: 26
5262 Sim Starting
5263 Sim over Total pop = 0 Tick Complete = 475
5264 Fitness = 1611.1199999999412
5265 Ai: 30 Gen: 26
5266 Sim Starting
5267 Sim over Total pop = 0 Tick Complete = 77
5268 Fitness = 664.7599999999996
5269 Ai: 31 Gen: 26
5270 Sim Starting
5271 Sim over Total pop = 0 Tick Complete = 70
5272 Fitness = 901.0
5273 Ai: 32 Gen: 26
5274 Sim Starting
5275 Sim over Total pop = 0 Tick Complete = 566
5276 Fitness = 1198.7399999999755
5277 Ai: 33 Gen: 26
5278 Sim Starting
5279 Sim over Total pop = 0 Tick Complete = 493
5280 Fitness = 994.2799999999644
5281 Ai: 34 Gen: 26
5282 Sim Starting
5283 Sim over Total pop = 0 Tick Complete = 197
5284 Fitness = 709.4699999999783
5285 Ai: 35 Gen: 26
5286 Sim Starting
5287 Sim over Total pop = 0 Tick Complete = 54
5288 Fitness = 95.7999999999231
5289 Ai: 36 Gen: 26
5290 Sim Starting
5291 Sim over Total pop = 0 Tick Complete = 366
5292 Fitness = 779.4699999999848
5293 Ai: 37 Gen: 26
5294 Sim Starting
5295 Sim over Total pop = 0 Tick Complete = 639
5296 Fitness = 1791.229999999976
```

```
5297 Ai: 38 Gen: 26
5298 Sim Starting
5299 Sim over Total pop = 0 Tick Complete = 332
5300 Fitness = 869.1399999999574
5301 Ai: 39 Gen: 26
5302 Sim Starting
5303 Sim over Total pop = 0 Tick Complete = 324
5304 Fitness = 976.5299999999822
5305 Ai: 40 Gen: 26
5306 Sim Starting
5307 Sim over Total pop = 0 Tick Complete = 168
5308 Fitness = 917.6799999999918
5309 Ai: 41 Gen: 26
5310 Sim Starting
5311 Sim over Total pop = 0 Tick Complete = 139
5312 Fitness = 871.5099999999952
5313 Ai: 42 Gen: 26
5314 Sim Starting
5315 Sim over Total pop = 0 Tick Complete = 844
5316 Fitness = 1770.219999999976
5317 Ai: 43 Gen: 26
5318 Sim Starting
5319 Sim over Total pop = 0 Tick Complete = 229
5320 Fitness = 1041.3699999999903
5321 Ai: 44 Gen: 26
5322 Sim Starting
5323 Sim over Total pop = 0 Tick Complete = 435
5324 Fitness = 1528.0499999999986
5325 Ai: 45 Gen: 26
5326 Sim Starting
5327 Sim over Total pop = 0 Tick Complete = 1031
5328 Fitness = 2068.5899999999797
5329 Ai: 46 Gen: 26
5330 Sim Starting
5331 Sim over Total pop = 0 Tick Complete = 117
5332 Fitness = 282.07999999998776
5333 Ai: 47 Gen: 26
5334 Sim Starting
5335 Sim over Total pop = 0 Tick Complete = 72
5336 Fitness = 81.59999999999563
5337 Ai: 48 Gen: 26
5338 Sim Starting
5339 Sim over Total pop = 0 Tick Complete = 311
5340 Fitness = 1048.7799999999459
```

```
5341 Ai: 49 Gen: 26
5342 Sim Starting
5343 Sim over Total pop = 0 Tick Complete = 173
5344 Fitness = 911.6099999999619
5345 Mean Fitness of Gen 26 is 1002.4175999999868 and
best fitness 2846.4099999999717
5346 Ai: 0 Gen: 27
5347 Sim Starting
5348 Sim over Total pop = 0 Tick Complete = 70
5349 Fitness = 764.0
5350 Ai: 1 Gen: 27
5351 Sim Starting
5352 Sim over Total pop = 0 Tick Complete = 1070
5353 Fitness = 1675.4299999999885
5354 Ai: 2 Gen: 27
5355 Sim Starting
5356 Sim over Total pop = 0 Tick Complete = 755
5357 Fitness = 1595.2099999999775
5358 Ai: 3 Gen: 27
5359 Sim Starting
5360 Sim over Total pop = 0 Tick Complete = 153
5361 Fitness = 758.1099999999867
5362 Ai: 4 Gen: 27
5363 Sim Starting
5364 Sim over Total pop = 0 Tick Complete = 206
5365 Fitness = 986.5899999999945
5366 Ai: 5 Gen: 27
5367 Sim Starting
5368 Sim over Total pop = 0 Tick Complete = 318
5369 Fitness = 1357.2899999999975
5370 Ai: 6 Gen: 27
5371 Sim Starting
5372 Sim over Total pop = 0 Tick Complete = 144
5373 Fitness = 899.2299999999942
5374 Ai: 7 Gen: 27
5375 Sim Starting
5376 Sim over Total pop = 0 Tick Complete = 216
5377 Fitness = 1147.979999999992
5378 Ai: 8 Gen: 27
5379 Sim Starting
5380 Sim over Total pop = 0 Tick Complete = 417
5381 Fitness = 1226.739999999993
5382 Ai: 9 Gen: 27
5383 Sim Starting
```

```
5384 Sim over Total pop = 0 Tick Complete = 122
5385 Fitness = 897.6899999999949
5386 Ai: 10 Gen: 27
5387 Sim Starting
5388 Sim over Total pop = 0 Tick Complete = 70
5389 Fitness = 891.0
5390 Ai: 11 Gen: 27
5391 Sim Starting
5392 Sim over Total pop = 0 Tick Complete = 81
5393 Fitness = 583.4599999999891
5394 Ai: 12 Gen: 27
5395 Sim Starting
5396 Sim over Total pop = 0 Tick Complete = 70
5397 Fitness = 759.0
5398 Ai: 13 Gen: 27
5399 Sim Starting
5400 Sim over Total pop = 0 Tick Complete = 70
5401 Fitness = 764.0
5402 Ai: 14 Gen: 27
5403 Sim Starting
5404 Sim over Total pop = 0 Tick Complete = 70
5405 Fitness = 962.0
5406 Ai: 15 Gen: 27
5407 Sim Starting
5408 Sim over Total pop = 0 Tick Complete = 355
5409 Fitness = 723.9099999999946
5410 Ai: 16 Gen: 27
5411 Sim Starting
5412 Sim over Total pop = 0 Tick Complete = 474
5413 Fitness = 1431.1499999999387
5414 Ai: 17 Gen: 27
5415 Sim Starting
5416 Sim over Total pop = 0 Tick Complete = 74
5417 Fitness = 698.0899999999996
5418 Ai: 18 Gen: 27
5419 Sim Starting
5420 Sim over Total pop = 0 Tick Complete = 70
5421 Fitness = 901.0
5422 Ai: 19 Gen: 27
5423 Sim Starting
5424 Sim over Total pop = 0 Tick Complete = 70
5425 Fitness = 967.0
5426 Ai: 20 Gen: 27
5427 Sim Starting
```

```
5428 Sim over Total pop = 0 Tick Complete = 180
5429 Fitness = 1179.6599999999933
5430 Ai: 21 Gen: 27
5431 Sim Starting
5432 Sim over Total pop = 0 Tick Complete = 70
5433 Fitness = 825.0
5434 Ai: 22 Gen: 27
5435 Sim Starting
5436 Sim over Total pop = 0 Tick Complete = 832
5437 Fitness = 1042.3900000000099
5438 Ai: 23 Gen: 27
5439 Sim Starting
5440 Sim over Total pop = 0 Tick Complete = 417
5441 Fitness = 1618.9599999999766
5442 Ai: 24 Gen: 27
5443 Sim Starting
5444 Sim over Total pop = 0 Tick Complete = 424
5445 Fitness = 1419.150000000009
5446 Ai: 25 Gen: 27
5447 Sim Starting
5448 Sim over Total pop = 0 Tick Complete = 131
5449 Fitness = 156.7299999999996
5450 Ai: 26 Gen: 27
5451 Sim Starting
5452 Sim over Total pop = 0 Tick Complete = 295
5453 Fitness = 1653.81999999997
5454 Ai: 27 Gen: 27
5455 Sim Starting
5456 Sim over Total pop = 0 Tick Complete = 510
5457 Fitness = 1626.009999999964
5458 Ai: 28 Gen: 27
5459 Sim Starting
5460 Sim over Total pop = 0 Tick Complete = 291
5461 Fitness = 1153.329999999998
5462 Ai: 29 Gen: 27
5463 Sim Starting
5464 Sim over Total pop = 0 Tick Complete = 408
5465 Fitness = 990.0199999999778
5466 Ai: 30 Gen: 27
5467 Sim Starting
5468 Sim over Total pop = 0 Tick Complete = 210
5469 Fitness = 943.9399999999941
5470 Ai: 31 Gen: 27
5471 Sim Starting
```

```
5472 Sim over Total pop = 0 Tick Complete = 175
5473 Fitness = 1335.7899999999909
5474 Ai: 32 Gen: 27
5475 Sim Starting
5476 Sim over Total pop = 0 Tick Complete = 133
5477 Fitness = 1056.0799999999995
5478 Ai: 33 Gen: 27
5479 Sim Starting
5480 Sim over Total pop = 0 Tick Complete = 210
5481 Fitness = 847.4999999999918
5482 Ai: 34 Gen: 27
5483 Sim Starting
5484 Sim over Total pop = 0 Tick Complete = 249
5485 Fitness = 749.7999999999707
5486 Ai: 35 Gen: 27
5487 Sim Starting
5488 Sim over Total pop = 0 Tick Complete = 393
5489 Fitness = 1661.5500000000093
5490 Ai: 36 Gen: 27
5491 Sim Starting
5492 Sim over Total pop = 0 Tick Complete = 286
5493 Fitness = 1361.619999999967
5494 Ai: 37 Gen: 27
5495 Sim Starting
5496 Sim over Total pop = 0 Tick Complete = 138
5497 Fitness = 895.0499999999977
5498 Ai: 38 Gen: 27
5499 Sim Starting
5500 Sim over Total pop = 0 Tick Complete = 377
5501 Fitness = 1631.7599999999795
5502 Ai: 39 Gen: 27
5503 Sim Starting
5504 Sim over Total pop = 0 Tick Complete = 175
5505 Fitness = 624.9899999999753
5506 Ai: 40 Gen: 27
5507 Sim Starting
5508 Sim over Total pop = 0 Tick Complete = 175
5509 Fitness = 945.0999999999611
5510 Ai: 41 Gen: 27
5511 Sim Starting
5512 Sim over Total pop = 0 Tick Complete = 86
5513 Fitness = 282.1299999999945
5514 Ai: 42 Gen: 27
5515 Sim Starting
```

```
5516 Sim over Total pop = 0 Tick Complete = 70
5517 Fitness = 896.0
5518 Ai: 43 Gen: 27
5519 Sim Starting
5520 Sim over Total pop = 0 Tick Complete = 105
5521 Fitness = 814.999999999985
5522 Ai: 44 Gen: 27
5523 Sim Starting
5524 Sim over Total pop = 0 Tick Complete = 70
5525 Fitness = 759.0
5526 Ai: 45 Gen: 27
5527 Sim Starting
5528 Sim over Total pop = 0 Tick Complete = 221
5529 Fitness = 663.6799999999896
5530 Ai: 46 Gen: 27
5531 Sim Starting
5532 Sim over Total pop = 0 Tick Complete = 70
5533 Fitness = 825.0
5534 Ai: 47 Gen: 27
5535 Sim Starting
5536 Sim over Total pop = 0 Tick Complete = 219
5537 Fitness = 417.51999999999595
5538 Mean Fitness of Gen 27 is 1007.613749999912 and
    best fitness 1675.4299999999885
5539 Ai: 0 Gen: 28
5540 Sim Starting
5541 Sim over Total pop = 0 Tick Complete = 106
5542 Fitness = 826.999999999998
5543 Ai: 1 Gen: 28
5544 Sim Starting
5545 Sim over Total pop = 0 Tick Complete = 365
5546 Fitness = 1247.5400000000052
5547 Ai: 2 Gen: 28
5548 Sim Starting
5549 Sim over Total pop = 0 Tick Complete = 156
5550 Fitness = 1149.949999999993
5551 Ai: 3 Gen: 28
5552 Sim Starting
5553 Sim over Total pop = 0 Tick Complete = 56
5554 Fitness = 367.5299999999962
5555 Ai: 4 Gen: 28
5556 Sim Starting
5557 Sim over Total pop = 0 Tick Complete = 153
5558 Fitness = 635.6799999999926
```

```
5559 Ai: 5 Gen: 28
5560 Sim Starting
5561 Sim over Total pop = 0 Tick Complete = 329
5562 Fitness = 738.8599999999946
5563 Ai: 6 Gen: 28
5564 Sim Starting
5565 Sim over Total pop = 0 Tick Complete = 399
5566 Fitness = 1140.5999999999858
5567 Ai: 7 Gen: 28
5568 Sim Starting
5569 Sim over Total pop = 0 Tick Complete = 186
5570 Fitness = 696.3599999999943
5571 Ai: 8 Gen: 28
5572 Sim Starting
5573 Sim over Total pop = 0 Tick Complete = 94
5574 Fitness = 724.9699999999923
5575 Ai: 9 Gen: 28
5576 Sim Starting
5577 Sim over Total pop = 0 Tick Complete = 69
5578 Fitness = 835.4199999999998
5579 Ai: 10 Gen: 28
5580 Sim Starting
5581 Sim over Total pop = 0 Tick Complete = 184
5582 Fitness = 722.6399999999935
5583 Ai: 11 Gen: 28
5584 Sim Starting
5585 Sim over Total pop = 0 Tick Complete = 69
5586 Fitness = 915.8999999999996
5587 Ai: 12 Gen: 28
5588 Sim Starting
5589 Sim over Total pop = 0 Tick Complete = 132
5590 Fitness = 837.5799999999834
5591 Ai: 13 Gen: 28
5592 Sim Starting
5593 Sim over Total pop = 0 Tick Complete = 165
5594 Fitness = 777.5799999999907
5595 Ai: 14 Gen: 28
5596 Sim Starting
5597 Sim over Total pop = 0 Tick Complete = 70
5598 Fitness = 962.0
5599 Ai: 15 Gen: 28
5600 Sim Starting
5601 Sim over Total pop = 0 Tick Complete = 70
5602 Fitness = 693.0
```

```
5603 Ai: 16 Gen: 28
5604 Sim Starting
5605 Sim over Total pop = 0 Tick Complete = 473
5606 Fitness = 803.3699999999835
5607 Ai: 17 Gen: 28
5608 Sim Starting
5609 Sim over Total pop = 0 Tick Complete = 70
5610 Fitness = 561.0
5611 Ai: 18 Gen: 28
5612 Sim Starting
5613 Sim over Total pop = 0 Tick Complete = 80
5614 Fitness = 774.8799999999973
5615 Ai: 19 Gen: 28
5616 Sim Starting
5617 Sim over Total pop = 0 Tick Complete = 440
5618 Fitness = 1759.9599999999355
5619 Ai: 20 Gen: 28
5620 Sim Starting
5621 Sim over Total pop = 0 Tick Complete = 479
5622 Fitness = 1544.6899999999662
5623 Ai: 21 Gen: 28
5624 Sim Starting
5625 Sim over Total pop = 0 Tick Complete = 308
5626 Fitness = 1499.5199999999725
5627 Ai: 22 Gen: 28
5628 Sim Starting
5629 Sim over Total pop = 0 Tick Complete = 214
5630 Fitness = 889.7999999999769
5631 Ai: 23 Gen: 28
5632 Sim Starting
5633 Sim over Total pop = 0 Tick Complete = 70
5634 Fitness = 825.0
5635 Ai: 24 Gen: 28
5636 Sim Starting
5637 Sim over Total pop = 0 Tick Complete = 70
5638 Fitness = 830.0
5639 Ai: 25 Gen: 28
5640 Sim Starting
5641 Sim over Total pop = 0 Tick Complete = 791
5642 Fitness = 2461.3399999999588
5643 Ai: 26 Gen: 28
5644 Sim Starting
5645 Sim over Total pop = 0 Tick Complete = 92
5646 Fitness = 718.9399999999899
```

```
5647 Ai: 27 Gen: 28
5648 Sim Starting
5649 Sim over Total pop = 0 Tick Complete = 70
5650 Fitness = 764.0
5651 Ai: 28 Gen: 28
5652 Sim Starting
5653 Sim over Total pop = 0 Tick Complete = 210
5654 Fitness = 365.8199999999963
5655 Ai: 29 Gen: 28
5656 Sim Starting
5657 Sim over Total pop = 0 Tick Complete = 61
5658 Fitness = 63.56999999999772
5659 Ai: 30 Gen: 28
5660 Sim Starting
5661 Sim over Total pop = 0 Tick Complete = 209
5662 Fitness = 1024.8199999999936
5663 Ai: 31 Gen: 28
5664 Sim Starting
5665 Sim over Total pop = 0 Tick Complete = 70
5666 Fitness = 825.0
5667 Ai: 32 Gen: 28
5668 Sim Starting
5669 Sim over Total pop = 0 Tick Complete = 55
5670 Fitness = 44.47999999998284
5671 Ai: 33 Gen: 28
5672 Sim Starting
5673 Sim over Total pop = 0 Tick Complete = 246
5674 Fitness = 959.4899999999881
5675 Ai: 34 Gen: 28
5676 Sim Starting
5677 Sim over Total pop = 0 Tick Complete = 805
5678 Fitness = 905.860000000007
5679 Ai: 35 Gen: 28
5680 Sim Starting
5681 Sim over Total pop = 0 Tick Complete = 470
5682 Fitness = 2171.979999999987
5683 Ai: 36 Gen: 28
5684 Sim Starting
5685 Sim over Total pop = 0 Tick Complete = 176
5686 Fitness = 694.2099999999875
5687 Ai: 37 Gen: 28
5688 Sim Starting
5689 Sim over Total pop = 0 Tick Complete = 204
5690 Fitness = 663.5699999999905
```

```
5691 Ai: 38 Gen: 28
5692 Sim Starting
5693 Sim over Total pop = 0 Tick Complete = 150
5694 Fitness = 896.9900000000002
5695 Ai: 39 Gen: 28
5696 Sim Starting
5697 Sim over Total pop = 0 Tick Complete = 193
5698 Fitness = 290.8099999999781
5699 Ai: 40 Gen: 28
5700 Sim Starting
5701 Sim over Total pop = 0 Tick Complete = 83
5702 Fitness = 240.0099999999914
5703 Ai: 41 Gen: 28
5704 Sim Starting
5705 Sim over Total pop = 0 Tick Complete = 192
5706 Fitness = 1057.419999999996
5707 Ai: 42 Gen: 28
5708 Sim Starting
5709 Sim over Total pop = 0 Tick Complete = 70
5710 Fitness = 972.0
5711 Ai: 43 Gen: 28
5712 Sim Starting
5713 Sim over Total pop = 0 Tick Complete = 209
5714 Fitness = 867.9899999999909
5715 Ai: 44 Gen: 28
5716 Sim Starting
5717 Sim over Total pop = 0 Tick Complete = 830
5718 Fitness = 1293.959999999976
5719 Ai: 45 Gen: 28
5720 Sim Starting
5721 Sim over Total pop = 0 Tick Complete = 205
5722 Fitness = 792.7299999999905
5723 Ai: 46 Gen: 28
5724 Sim Starting
5725 Sim over Total pop = 0 Tick Complete = 201
5726 Fitness = 597.6099999999898
5727 Ai: 47 Gen: 28
5728 Sim Starting
5729 Sim over Total pop = 0 Tick Complete = 437
5730 Fitness = 909.4699999999988
5731 Ai: 48 Gen: 28
5732 Sim Starting
5733 Sim over Total pop = 0 Tick Complete = 126
5734 Fitness = 808.7499999999936
```

```
5735 Mean Fitness of Gen 28 is 880.6459183673375 and
      best fitness 2461.3399999999588
5736 Ai: 0 Gen: 29
5737 Sim Starting
5738 Sim over Total pop = 0 Tick Complete = 432
5739 Fitness = 1416.550000000023
5740 Ai: 1 Gen: 29
5741 Sim Starting
5742 Sim over Total pop = 0 Tick Complete = 192
5743 Fitness = 934.5599999999832
5744 Ai: 2 Gen: 29
5745 Sim Starting
5746 Sim over Total pop = 0 Tick Complete = 70
5747 Fitness = 759.0
5748 Ai: 3 Gen: 29
5749 Sim Starting
5750 Sim over Total pop = 0 Tick Complete = 70
5751 Fitness = 693.0
5752 Ai: 4 Gen: 29
5753 Sim Starting
5754 Sim over Total pop = 0 Tick Complete = 70
5755 Fitness = 769.0
5756 Ai: 5 Gen: 29
5757 Sim Starting
5758 Sim over Total pop = 0 Tick Complete = 360
5759 Fitness = 727.4599999999963
5760 Ai: 6 Gen: 29
5761 Sim Starting
5762 Sim over Total pop = 0 Tick Complete = 70
5763 Fitness = 698.0
5764 Ai: 7 Gen: 29
5765 Sim Starting
5766 Sim over Total pop = 0 Tick Complete = 1389
5767 Fitness = 2408.180000000024
5768 Ai: 8 Gen: 29
5769 Sim Starting
5770 Sim over Total pop = 0 Tick Complete = 124
5771 Fitness = 934.2600000000058
5772 Ai: 9 Gen: 29
5773 Sim Starting
5774 Sim over Total pop = 0 Tick Complete = 814
5775 Fitness = 1486.1799999999619
5776 Ai: 10 Gen: 29
5777 Sim Starting
```

```
5778 Sim over Total pop = 0 Tick Complete = 70
5779 Fitness = 1028.0
5780 Ai: 11 Gen: 29
5781 Sim Starting
5782 Sim over Total pop = 0 Tick Complete = 79
5783 Fitness = 478.719999999999
5784 Ai: 12 Gen: 29
5785 Sim Starting
5786 Sim over Total pop = 0 Tick Complete = 449
5787 Fitness = 1037.6799999999885
5788 Ai: 13 Gen: 29
5789 Sim Starting
5790 Sim over Total pop = 0 Tick Complete = 70
5791 Fitness = 896.0
5792 Ai: 14 Gen: 29
5793 Sim Starting
5794 Sim over Total pop = 0 Tick Complete = 70
5795 Fitness = 901.0
5796 Ai: 15 Gen: 29
5797 Sim Starting
5798 Sim over Total pop = 0 Tick Complete = 498
5799 Fitness = 1519.079999999985
5800 Ai: 16 Gen: 29
5801 Sim Starting
5802 Sim over Total pop = 0 Tick Complete = 1448
5803 Fitness = 2011.359999999974
5804 Ai: 17 Gen: 29
5805 Sim Starting
5806 Sim over Total pop = 0 Tick Complete = 70
5807 Fitness = 632.0
5808 Ai: 18 Gen: 29
5809 Sim Starting
5810 Sim over Total pop = 0 Tick Complete = 70
5811 Fitness = 896.0
5812 Ai: 19 Gen: 29
5813 Sim Starting
5814 Sim over Total pop = 0 Tick Complete = 70
5815 Fitness = 759.0
5816 Ai: 20 Gen: 29
5817 Sim Starting
5818 Sim over Total pop = 0 Tick Complete = 70
5819 Fitness = 764.0
5820 Ai: 21 Gen: 29
5821 Sim Starting
```

```
5822 Sim over Total pop = 0 Tick Complete = 371
5823 Fitness = 1585.5399999999806
5824 Ai: 22 Gen: 29
5825 Sim Starting
5826 Sim over Total pop = 0 Tick Complete = 439
5827 Fitness = 1151.1299999999887
5828 Ai: 23 Gen: 29
5829 Sim Starting
5830 Sim over Total pop = 0 Tick Complete = 676
5831 Fitness = 1211.600000000021
5832 Ai: 24 Gen: 29
5833 Sim Starting
5834 Sim over Total pop = 0 Tick Complete = 122
5835 Fitness = 882.5900000000021
5836 Ai: 25 Gen: 29
5837 Sim Starting
5838 Sim over Total pop = 0 Tick Complete = 79
5839 Fitness = 723.659999999997
5840 Ai: 26 Gen: 29
5841 Sim Starting
5842 Sim over Total pop = 0 Tick Complete = 262
5843 Fitness = 1094.9499999999882
5844 Ai: 27 Gen: 29
5845 Sim Starting
5846 Sim over Total pop = 0 Tick Complete = 554
5847 Fitness = 964.7699999999829
5848 Ai: 28 Gen: 29
5849 Sim Starting
5850 Sim over Total pop = 0 Tick Complete = 180
5851 Fitness = 1086.940000000002
5852 Ai: 29 Gen: 29
5853 Sim Starting
5854 Sim over Total pop = 0 Tick Complete = 156
5855 Fitness = 280.72999999998706
5856 Ai: 30 Gen: 29
5857 Sim Starting
5858 Sim over Total pop = 0 Tick Complete = 1111
5859 Fitness = 1751.6599999999348
5860 Ai: 31 Gen: 29
5861 Sim Starting
5862 Sim over Total pop = 0 Tick Complete = 231
5863 Fitness = 860.3099999999669
5864 Ai: 32 Gen: 29
5865 Sim Starting
```

```
5866 Sim over Total pop = 0 Tick Complete = 61
5867 Fitness = 58.12999999999832
5868 Ai: 33 Gen: 29
5869 Sim Starting
5870 Sim over Total pop = 0 Tick Complete = 144
5871 Fitness = 607.72999999999835
5872 Ai: 34 Gen: 29
5873 Sim Starting
5874 Sim over Total pop = 0 Tick Complete = 271
5875 Fitness = 1194.04999999999847
5876 Ai: 35 Gen: 29
5877 Sim Starting
5878 Sim over Total pop = 0 Tick Complete = 91
5879 Fitness = 228.46999999999144
5880 Ai: 36 Gen: 29
5881 Sim Starting
5882 Sim over Total pop = 0 Tick Complete = 213
5883 Fitness = 1465.65
5884 Ai: 37 Gen: 29
5885 Sim Starting
5886 Sim over Total pop = 0 Tick Complete = 106
5887 Fitness = 883.8699999999995
5888 Ai: 38 Gen: 29
5889 Sim Starting
5890 Sim over Total pop = 0 Tick Complete = 1538
5891 Fitness = 2804.6699999998873
5892 Ai: 39 Gen: 29
5893 Sim Starting
5894 Sim over Total pop = 0 Tick Complete = 70
5895 Fitness = 835.0
5896 Ai: 40 Gen: 29
5897 Sim Starting
5898 Sim over Total pop = 0 Tick Complete = 85
5899 Fitness = 662.6099999999925
5900 Ai: 41 Gen: 29
5901 Sim Starting
5902 Sim over Total pop = 0 Tick Complete = 77
5903 Fitness = 583.4999999999925
5904 Ai: 42 Gen: 29
5905 Sim Starting
5906 Sim over Total pop = 0 Tick Complete = 482
5907 Fitness = 1979.7399999999861
5908 Ai: 43 Gen: 29
5909 Sim Starting
```

```
5910 Sim over Total pop = 0 Tick Complete = 70
5911 Fitness = 761.8899999999974
5912 Ai: 44 Gen: 29
5913 Sim Starting
5914 Sim over Total pop = 0 Tick Complete = 232
5915 Fitness = 1388.2600000000075
5916 Ai: 45 Gen: 29
5917 Sim Starting
5918 Sim over Total pop = 0 Tick Complete = 162
5919 Fitness = 815.3499999999838
5920 Ai: 46 Gen: 29
5921 Sim Starting
5922 Sim over Total pop = 0 Tick Complete = 110
5923 Fitness = 720.0099999999861
5924 Ai: 47 Gen: 29
5925 Sim Starting
5926 Sim over Total pop = 0 Tick Complete = 105
5927 Fitness = 774.2199999999999
5928 Ai: 48 Gen: 29
5929 Sim Starting
5930 Sim over Total pop = 0 Tick Complete = 370
5931 Fitness = 1398.1700000000092
5932 Mean Fitness of Gen 29 is 1030.6985714285634 and
    best fitness 2804.6699999998873
5933 Ai: 0 Gen: 30
5934 Sim Starting
5935 Sim over Total pop = 0 Tick Complete = 201
5936 Fitness = 1156.1899999999928
5937 Ai: 1 Gen: 30
5938 Sim Starting
5939 Sim over Total pop = 0 Tick Complete = 548
5940 Fitness = 2027.4099999999908
5941 Ai: 2 Gen: 30
5942 Sim Starting
5943 Sim over Total pop = 0 Tick Complete = 70
5944 Fitness = 825.0
5945 Ai: 3 Gen: 30
5946 Sim Starting
5947 Sim over Total pop = 0 Tick Complete = 365
5948 Fitness = 944.3399999999733
5949 Ai: 4 Gen: 30
5950 Sim Starting
5951 Sim over Total pop = 0 Tick Complete = 224
5952 Fitness = 1108.2599999999877
```

```
5953 Ai: 5 Gen: 30
5954 Sim Starting
5955 Sim over Total pop = 0 Tick Complete = 816
5956 Fitness = 1797.94000000000187
5957 Ai: 6 Gen: 30
5958 Sim Starting
5959 Sim over Total pop = 0 Tick Complete = 512
5960 Fitness = 1580.84000000000042
5961 Ai: 7 Gen: 30
5962 Sim Starting
5963 Sim over Total pop = 0 Tick Complete = 326
5964 Fitness = 1234.1799999999894
5965 Ai: 8 Gen: 30
5966 Sim Starting
5967 Sim over Total pop = 0 Tick Complete = 430
5968 Fitness = 1174.199999999972
5969 Ai: 9 Gen: 30
5970 Sim Starting
5971 Sim over Total pop = 0 Tick Complete = 1699
5972 Fitness = 2596.020000000085
5973 Ai: 10 Gen: 30
5974 Sim Starting
5975 Sim over Total pop = 0 Tick Complete = 219
5976 Fitness = 429.58999999998395
5977 Ai: 11 Gen: 30
5978 Sim Starting
5979 Sim over Total pop = 0 Tick Complete = 79
5980 Fitness = 240.56999999998976
5981 Ai: 12 Gen: 30
5982 Sim Starting
5983 Sim over Total pop = 0 Tick Complete = 176
5984 Fitness = 890.949999999983
5985 Ai: 13 Gen: 30
5986 Sim Starting
5987 Sim over Total pop = 0 Tick Complete = 209
5988 Fitness = 1177.5700000000156
5989 Ai: 14 Gen: 30
5990 Sim Starting
5991 Sim over Total pop = 5 Tick Complete = 2001
5992 Fitness = 2355.9399999999496
5993 Ai: 15 Gen: 30
5994 Sim Starting
5995 Sim over Total pop = 0 Tick Complete = 168
5996 Fitness = 934.9799999999805
```

```
5997 Ai: 16 Gen: 30
5998 Sim Starting
5999 Sim over Total pop = 0 Tick Complete = 110
6000 Fitness = 247.4099999999815
6001 Ai: 17 Gen: 30
6002 Sim Starting
6003 Sim over Total pop = 0 Tick Complete = 585
6004 Fitness = 1709.0599999999922
6005 Ai: 18 Gen: 30
6006 Sim Starting
6007 Sim over Total pop = 0 Tick Complete = 359
6008 Fitness = 1410.5700000000026
6009 Ai: 19 Gen: 30
6010 Sim Starting
6011 Sim over Total pop = 0 Tick Complete = 112
6012 Fitness = 869.9199999999958
6013 Ai: 20 Gen: 30
6014 Sim Starting
6015 Sim over Total pop = 0 Tick Complete = 88
6016 Fitness = 378.56999999998783
6017 Ai: 21 Gen: 30
6018 Sim Starting
6019 Sim over Total pop = 0 Tick Complete = 406
6020 Fitness = 1563.5399999999759
6021 Ai: 22 Gen: 30
6022 Sim Starting
6023 Sim over Total pop = 0 Tick Complete = 608
6024 Fitness = 1116.1999999999914
6025 Ai: 23 Gen: 30
6026 Sim Starting
6027 Sim over Total pop = 0 Tick Complete = 103
6028 Fitness = 1008.0599999999939
6029 Ai: 24 Gen: 30
6030 Sim Starting
6031 Sim over Total pop = 0 Tick Complete = 121
6032 Fitness = 432.0999999999167
6033 Ai: 25 Gen: 30
6034 Sim Starting
6035 Sim over Total pop = 0 Tick Complete = 270
6036 Fitness = 690.3899999999878
6037 Ai: 26 Gen: 30
6038 Sim Starting
6039 Sim over Total pop = 0 Tick Complete = 158
6040 Fitness = 811.3199999999748
```

```
6041 Ai: 27 Gen: 30
6042 Sim Starting
6043 Sim over Total pop = 0 Tick Complete = 204
6044 Fitness = 1081.5899999999879
6045 Ai: 28 Gen: 30
6046 Sim Starting
6047 Sim over Total pop = 0 Tick Complete = 441
6048 Fitness = 1108.4599999999778
6049 Ai: 29 Gen: 30
6050 Sim Starting
6051 Sim over Total pop = 0 Tick Complete = 297
6052 Fitness = 1183.699999999986
6053 Ai: 30 Gen: 30
6054 Sim Starting
6055 Sim over Total pop = 0 Tick Complete = 1070
6056 Fitness = 1715.199999999966
6057 Ai: 31 Gen: 30
6058 Sim Starting
6059 Sim over Total pop = 0 Tick Complete = 63
6060 Fitness = 104.5699999999704
6061 Ai: 32 Gen: 30
6062 Sim Starting
6063 Sim over Total pop = 0 Tick Complete = 734
6064 Fitness = 1022.4399999999979
6065 Ai: 33 Gen: 30
6066 Sim Starting
6067 Sim over Total pop = 0 Tick Complete = 248
6068 Fitness = 1187.9600000000008
6069 Ai: 34 Gen: 30
6070 Sim Starting
6071 Sim over Total pop = 0 Tick Complete = 267
6072 Fitness = 609.1799999999978
6073 Ai: 35 Gen: 30
6074 Sim Starting
6075 Sim over Total pop = 0 Tick Complete = 70
6076 Fitness = 896.0
6077 Ai: 36 Gen: 30
6078 Sim Starting
6079 Sim over Total pop = 0 Tick Complete = 58
6080 Fitness = 28.7999999999816
6081 Ai: 37 Gen: 30
6082 Sim Starting
6083 Sim over Total pop = 0 Tick Complete = 70
6084 Fitness = 962.0
```

```
6085 Ai: 38 Gen: 30
6086 Sim Starting
6087 Sim over Total pop = 0 Tick Complete = 758
6088 Fitness = 1368.959999999925
6089 Ai: 39 Gen: 30
6090 Sim Starting
6091 Sim over Total pop = 0 Tick Complete = 160
6092 Fitness = 923.7099999999991
6093 Ai: 40 Gen: 30
6094 Sim Starting
6095 Sim over Total pop = 0 Tick Complete = 543
6096 Fitness = 1407.9099999999914
6097 Ai: 41 Gen: 30
6098 Sim Starting
6099 Sim over Total pop = 0 Tick Complete = 132
6100 Fitness = 196.82999999999262
6101 Ai: 42 Gen: 30
6102 Sim Starting
6103 Sim over Total pop = 0 Tick Complete = 66
6104 Fitness = 650.8099999999972
6105 Ai: 43 Gen: 30
6106 Sim Starting
6107 Sim over Total pop = 0 Tick Complete = 70
6108 Fitness = 830.0
6109 Ai: 44 Gen: 30
6110 Sim Starting
6111 Sim over Total pop = 0 Tick Complete = 299
6112 Fitness = 1181.6699999999923
6113 Ai: 45 Gen: 30
6114 Sim Starting
6115 Sim over Total pop = 0 Tick Complete = 762
6116 Fitness = 979.6399999999181
6117 Ai: 46 Gen: 30
6118 Sim Starting
6119 Sim over Total pop = 0 Tick Complete = 70
6120 Fitness = 764.0
6121 Ai: 47 Gen: 30
6122 Sim Starting
6123 Sim over Total pop = 0 Tick Complete = 755
6124 Fitness = 889.6699999999569
6125 Ai: 48 Gen: 30
6126 Sim Starting
6127 Sim over Total pop = 2 Tick Complete = 2001
6128 Fitness = 3603.0500000006027
```

```
6129 Ai: 49 Gen: 30
6130 Sim Starting
6131 Sim over Total pop = 0 Tick Complete = 669
6132 Fitness = 1610.9899999999898
6133 Mean Fitness of Gen 30 is 1100.365200000002 and
    best fitness 3603.0500000006027
6134 Ai: 0 Gen: 31
6135 Sim Starting
6136 Sim over Total pop = 0 Tick Complete = 254
6137 Fitness = 500.60999999998427
6138 Ai: 1 Gen: 31
6139 Sim Starting
6140 Sim over Total pop = 0 Tick Complete = 387
6141 Fitness = 621.7599999999568
6142 Ai: 2 Gen: 31
6143 Sim Starting
6144 Sim over Total pop = 0 Tick Complete = 703
6145 Fitness = 1281.1299999999842
6146 Ai: 3 Gen: 31
6147 Sim Starting
6148 Sim over Total pop = 0 Tick Complete = 83
6149 Fitness = 230.16999999998723
6150 Ai: 4 Gen: 31
6151 Sim Starting
6152 Sim over Total pop = 0 Tick Complete = 65
6153 Fitness = 172.14999999999696
6154 Ai: 5 Gen: 31
6155 Sim Starting
6156 Sim over Total pop = 0 Tick Complete = 403
6157 Fitness = 1591.819999999965
6158 Ai: 6 Gen: 31
6159 Sim Starting
6160 Sim over Total pop = 0 Tick Complete = 70
6161 Fitness = 637.0
6162 Ai: 7 Gen: 31
6163 Sim Starting
6164 Sim over Total pop = 0 Tick Complete = 377
6165 Fitness = 1092.4999999999836
6166 Ai: 8 Gen: 31
6167 Sim Starting
6168 Sim over Total pop = 5 Tick Complete = 2001
6169 Fitness = 2580.1199999999235
6170 Ai: 9 Gen: 31
6171 Sim Starting
```

```
6172 Sim over Total pop = 0 Tick Complete = 89
6173 Fitness = 729.5099999999993
6174 Ai: 10 Gen: 31
6175 Sim Starting
6176 Sim over Total pop = 0 Tick Complete = 176
6177 Fitness = 1079.0399999999963
6178 Ai: 11 Gen: 31
6179 Sim Starting
6180 Sim over Total pop = 0 Tick Complete = 175
6181 Fitness = 1020.880000000003
6182 Ai: 12 Gen: 31
6183 Sim Starting
6184 Sim over Total pop = 0 Tick Complete = 69
6185 Fitness = 824.9699999999941
6186 Ai: 13 Gen: 31
6187 Sim Starting
6188 Sim over Total pop = 0 Tick Complete = 367
6189 Fitness = 1250.2499999999877
6190 Ai: 14 Gen: 31
6191 Sim Starting
6192 Sim over Total pop = 0 Tick Complete = 70
6193 Fitness = 825.0
6194 Ai: 15 Gen: 31
6195 Sim Starting
6196 Sim over Total pop = 0 Tick Complete = 70
6197 Fitness = 764.0
6198 Ai: 16 Gen: 31
6199 Sim Starting
6200 Sim over Total pop = 0 Tick Complete = 492
6201 Fitness = 1414.7599999999898
6202 Ai: 17 Gen: 31
6203 Sim Starting
6204 Sim over Total pop = 0 Tick Complete = 70
6205 Fitness = 693.0
6206 Ai: 18 Gen: 31
6207 Sim Starting
6208 Sim over Total pop = 0 Tick Complete = 87
6209 Fitness = 374.1799999999996
6210 Ai: 19 Gen: 31
6211 Sim Starting
6212 Sim over Total pop = 0 Tick Complete = 187
6213 Fitness = 1056.9799999999886
6214 Ai: 20 Gen: 31
6215 Sim Starting
```

```
6216 Sim over Total pop = 0 Tick Complete = 337
6217 Fitness = 1287.0799999999854
6218 Ai: 21 Gen: 31
6219 Sim Starting
6220 Sim over Total pop = 0 Tick Complete = 1208
6221 Fitness = 2068.039999999931
6222 Ai: 22 Gen: 31
6223 Sim Starting
6224 Sim over Total pop = 0 Tick Complete = 79
6225 Fitness = 60.3399999999463
6226 Ai: 23 Gen: 31
6227 Sim Starting
6228 Sim over Total pop = 0 Tick Complete = 1930
6229 Fitness = 3043.179999999964
6230 Ai: 24 Gen: 31
6231 Sim Starting
6232 Sim over Total pop = 0 Tick Complete = 146
6233 Fitness = 890.9299999999896
6234 Ai: 25 Gen: 31
6235 Sim Starting
6236 Sim over Total pop = 0 Tick Complete = 70
6237 Fitness = 896.0
6238 Ai: 26 Gen: 31
6239 Sim Starting
6240 Sim over Total pop = 0 Tick Complete = 907
6241 Fitness = 1992.379999999984
6242 Ai: 27 Gen: 31
6243 Sim Starting
6244 Sim over Total pop = 0 Tick Complete = 1049
6245 Fitness = 2282.9199999999273
6246 Ai: 28 Gen: 31
6247 Sim Starting
6248 Sim over Total pop = 0 Tick Complete = 70
6249 Fitness = 698.0
6250 Ai: 29 Gen: 31
6251 Sim Starting
6252 Sim over Total pop = 0 Tick Complete = 154
6253 Fitness = 1076.8700000000053
6254 Ai: 30 Gen: 31
6255 Sim Starting
6256 Sim over Total pop = 0 Tick Complete = 73
6257 Fitness = 218.2099999999927
6258 Ai: 31 Gen: 31
6259 Sim Starting
```

```
6260 Sim over Total pop = 0 Tick Complete = 540
6261 Fitness = 1564.2799999999493
6262 Ai: 32 Gen: 31
6263 Sim Starting
6264 Sim over Total pop = 0 Tick Complete = 63
6265 Fitness = 128.42999999999137
6266 Ai: 33 Gen: 31
6267 Sim Starting
6268 Sim over Total pop = 0 Tick Complete = 123
6269 Fitness = 334.7699999999795
6270 Ai: 34 Gen: 31
6271 Sim Starting
6272 Sim over Total pop = 0 Tick Complete = 390
6273 Fitness = 1328.8799999999865
6274 Ai: 35 Gen: 31
6275 Sim Starting
6276 Sim over Total pop = 0 Tick Complete = 299
6277 Fitness = 1016.4099999999263
6278 Ai: 36 Gen: 31
6279 Sim Starting
6280 Sim over Total pop = 0 Tick Complete = 124
6281 Fitness = 567.7599999999866
6282 Ai: 37 Gen: 31
6283 Sim Starting
6284 Sim over Total pop = 0 Tick Complete = 205
6285 Fitness = 760.3699999999966
6286 Ai: 38 Gen: 31
6287 Sim Starting
6288 Sim over Total pop = 0 Tick Complete = 528
6289 Fitness = 1561.930000000012
6290 Ai: 39 Gen: 31
6291 Sim Starting
6292 Sim over Total pop = 0 Tick Complete = 150
6293 Fitness = 405.1499999999892
6294 Ai: 40 Gen: 31
6295 Sim Starting
6296 Sim over Total pop = 0 Tick Complete = 64
6297 Fitness = 662.7599999999953
6298 Ai: 41 Gen: 31
6299 Sim Starting
6300 Sim over Total pop = 0 Tick Complete = 407
6301 Fitness = 739.1799999999498
6302 Ai: 42 Gen: 31
6303 Sim Starting
```

```
6304 Sim over Total pop = 0 Tick Complete = 70
6305 Fitness = 896.0
6306 Ai: 43 Gen: 31
6307 Sim Starting
6308 Sim over Total pop = 3 Tick Complete = 2001
6309 Fitness = 2627.46999999985
6310 Ai: 44 Gen: 31
6311 Sim Starting
6312 Sim over Total pop = 0 Tick Complete = 70
6313 Fitness = 693.0
6314 Ai: 45 Gen: 31
6315 Sim Starting
6316 Sim over Total pop = 0 Tick Complete = 443
6317 Fitness = 1256.5300000000002
6318 Ai: 46 Gen: 31
6319 Sim Starting
6320 Sim over Total pop = 0 Tick Complete = 65
6321 Fitness = 291.1199999998955
6322 Ai: 47 Gen: 31
6323 Sim Starting
6324 Sim over Total pop = 0 Tick Complete = 326
6325 Fitness = 1167.1699999999598
6326 Ai: 48 Gen: 31
6327 Sim Starting
6328 Sim over Total pop = 0 Tick Complete = 95
6329 Fitness = 765.5299999999979
6330 Ai: 49 Gen: 31
6331 Sim Starting
6332 Sim over Total pop = 0 Tick Complete = 70
6333 Fitness = 1033.0
6334 Mean Fitness of Gen 31 is 1021.070399999813 and
best fitness 3043.179999999964
6335 Ai: 0 Gen: 32
6336 Sim Starting
6337 Sim over Total pop = 0 Tick Complete = 1051
6338 Fitness = 2175.629999999979
6339 Ai: 1 Gen: 32
6340 Sim Starting
6341 Sim over Total pop = 0 Tick Complete = 70
6342 Fitness = 764.0
6343 Ai: 2 Gen: 32
6344 Sim Starting
6345 Sim over Total pop = 0 Tick Complete = 969
6346 Fitness = 2039.0100000000386
```

```
6347 Ai: 3 Gen: 32
6348 Sim Starting
6349 Sim over Total pop = 0 Tick Complete = 195
6350 Fitness = 1020.4999999999993
6351 Ai: 4 Gen: 32
6352 Sim Starting
6353 Sim over Total pop = 0 Tick Complete = 77
6354 Fitness = 270.9499999999924
6355 Ai: 5 Gen: 32
6356 Sim Starting
6357 Sim over Total pop = 0 Tick Complete = 70
6358 Fitness = 759.0
6359 Ai: 6 Gen: 32
6360 Sim Starting
6361 Sim over Total pop = 2 Tick Complete = 2001
6362 Fitness = 2384.3499999999704
6363 Ai: 7 Gen: 32
6364 Sim Starting
6365 Sim over Total pop = 0 Tick Complete = 70
6366 Fitness = 825.0
6367 Ai: 8 Gen: 32
6368 Sim Starting
6369 Sim over Total pop = 3 Tick Complete = 2001
6370 Fitness = 2973.7000000001117
6371 Ai: 9 Gen: 32
6372 Sim Starting
6373 Sim over Total pop = 0 Tick Complete = 199
6374 Fitness = 1197.3399999999826
6375 Ai: 10 Gen: 32
6376 Sim Starting
6377 Sim over Total pop = 0 Tick Complete = 346
6378 Fitness = 2057.999999999998
6379 Ai: 11 Gen: 32
6380 Sim Starting
6381 Sim over Total pop = 0 Tick Complete = 446
6382 Fitness = 1821.619999999973
6383 Ai: 12 Gen: 32
6384 Sim Starting
6385 Sim over Total pop = 0 Tick Complete = 1155
6386 Fitness = 2336.629999999912
6387 Ai: 13 Gen: 32
6388 Sim Starting
6389 Sim over Total pop = 0 Tick Complete = 195
6390 Fitness = 724.9499999999888
```

```
6391 Ai: 14 Gen: 32
6392 Sim Starting
6393 Sim over Total pop = 0 Tick Complete = 538
6394 Fitness = 1189.899999999977
6395 Ai: 15 Gen: 32
6396 Sim Starting
6397 Sim over Total pop = 0 Tick Complete = 568
6398 Fitness = 1094.9599999999068
6399 Ai: 16 Gen: 32
6400 Sim Starting
6401 Sim over Total pop = 0 Tick Complete = 150
6402 Fitness = 1105.6799999999864
6403 Ai: 17 Gen: 32
6404 Sim Starting
6405 Sim over Total pop = 0 Tick Complete = 530
6406 Fitness = 955.1400000000001
6407 Ai: 18 Gen: 32
6408 Sim Starting
6409 Sim over Total pop = 0 Tick Complete = 70
6410 Fitness = 561.0
6411 Ai: 19 Gen: 32
6412 Sim Starting
6413 Sim over Total pop = 0 Tick Complete = 73
6414 Fitness = 183.54999999999558
6415 Ai: 20 Gen: 32
6416 Sim Starting
6417 Sim over Total pop = 0 Tick Complete = 63
6418 Fitness = 123.51999999999087
6419 Ai: 21 Gen: 32
6420 Sim Starting
6421 Sim over Total pop = 0 Tick Complete = 70
6422 Fitness = 693.0
6423 Ai: 22 Gen: 32
6424 Sim Starting
6425 Sim over Total pop = 0 Tick Complete = 65
6426 Fitness = 282.7599999999961
6427 Ai: 23 Gen: 32
6428 Sim Starting
6429 Sim over Total pop = 0 Tick Complete = 712
6430 Fitness = 1569.439999999967
6431 Ai: 24 Gen: 32
6432 Sim Starting
6433 Sim over Total pop = 0 Tick Complete = 1471
6434 Fitness = 2704.3499999999176
```

```
6435 Ai: 25 Gen: 32
6436 Sim Starting
6437 Sim over Total pop = 0 Tick Complete = 70
6438 Fitness = 769.0
6439 Ai: 26 Gen: 32
6440 Sim Starting
6441 Sim over Total pop = 0 Tick Complete = 130
6442 Fitness = 294.9099999999763
6443 Ai: 27 Gen: 32
6444 Sim Starting
6445 Sim over Total pop = 0 Tick Complete = 708
6446 Fitness = 1897.0900000000022
6447 Ai: 28 Gen: 32
6448 Sim Starting
6449 Sim over Total pop = 0 Tick Complete = 645
6450 Fitness = 1171.0599999999924
6451 Ai: 29 Gen: 32
6452 Sim Starting
6453 Sim over Total pop = 0 Tick Complete = 67
6454 Fitness = 224.81999999999022
6455 Ai: 30 Gen: 32
6456 Sim Starting
6457 Sim over Total pop = 5 Tick Complete = 2001
6458 Fitness = 3574.6099999999674
6459 Ai: 31 Gen: 32
6460 Sim Starting
6461 Sim over Total pop = 0 Tick Complete = 751
6462 Fitness = 1818.0199999999772
6463 Ai: 32 Gen: 32
6464 Sim Starting
6465 Sim over Total pop = 0 Tick Complete = 205
6466 Fitness = 1141.129999999991
6467 Ai: 33 Gen: 32
6468 Sim Starting
6469 Sim over Total pop = 0 Tick Complete = 632
6470 Fitness = 797.149999999986
6471 Ai: 34 Gen: 32
6472 Sim Starting
6473 Sim over Total pop = 0 Tick Complete = 112
6474 Fitness = 662.1199999999852
6475 Ai: 35 Gen: 32
6476 Sim Starting
6477 Sim over Total pop = 0 Tick Complete = 154
6478 Fitness = 555.029999999969
```

```
6479 Ai: 36 Gen: 32
6480 Sim Starting
6481 Sim over Total pop = 0 Tick Complete = 1813
6482 Fitness = 3261.540000000002
6483 Ai: 37 Gen: 32
6484 Sim Starting
6485 Sim over Total pop = 0 Tick Complete = 1027
6486 Fitness = 1580.4499999999884
6487 Ai: 38 Gen: 32
6488 Sim Starting
6489 Sim over Total pop = 0 Tick Complete = 586
6490 Fitness = 1499.2999999999893
6491 Ai: 39 Gen: 32
6492 Sim Starting
6493 Sim over Total pop = 0 Tick Complete = 808
6494 Fitness = 1651.8799999999892
6495 Ai: 40 Gen: 32
6496 Sim Starting
6497 Sim over Total pop = 0 Tick Complete = 70
6498 Fitness = 967.0
6499 Ai: 41 Gen: 32
6500 Sim Starting
6501 Sim over Total pop = 0 Tick Complete = 70
6502 Fitness = 962.0
6503 Ai: 42 Gen: 32
6504 Sim Starting
6505 Sim over Total pop = 0 Tick Complete = 790
6506 Fitness = 2426.87000000005
6507 Ai: 43 Gen: 32
6508 Sim Starting
6509 Sim over Total pop = 0 Tick Complete = 1248
6510 Fitness = 2305.6500000000588
6511 Ai: 44 Gen: 32
6512 Sim Starting
6513 Sim over Total pop = 0 Tick Complete = 204
6514 Fitness = 1003.2299999999962
6515 Ai: 45 Gen: 32
6516 Sim Starting
6517 Sim over Total pop = 0 Tick Complete = 1334
6518 Fitness = 1729.7499999999827
6519 Ai: 46 Gen: 32
6520 Sim Starting
6521 Sim over Total pop = 0 Tick Complete = 1079
6522 Fitness = 1593.6799999999894
```

```
6523 Ai: 47 Gen: 32
6524 Sim Starting
6525 Sim over Total pop = 0 Tick Complete = 84
6526 Fitness = 400.0499999999872
6527 Mean Fitness of Gen 32 is 1335.423333333243 and
    best fitness 3574.6099999999674
6528 Ai: 0 Gen: 33
6529 Sim Starting
6530 Sim over Total pop = 0 Tick Complete = 79
6531 Fitness = 159.18999999999636
6532 Ai: 1 Gen: 33
6533 Sim Starting
6534 Sim over Total pop = 0 Tick Complete = 70
6535 Fitness = 764.0
6536 Ai: 2 Gen: 33
6537 Sim Starting
6538 Sim over Total pop = 0 Tick Complete = 77
6539 Fitness = 205.24999999999756
6540 Ai: 3 Gen: 33
6541 Sim Starting
6542 Sim over Total pop = 0 Tick Complete = 70
6543 Fitness = 830.0
6544 Ai: 4 Gen: 33
6545 Sim Starting
6546 Sim over Total pop = 0 Tick Complete = 181
6547 Fitness = 519.7699999999882
6548 Ai: 5 Gen: 33
6549 Sim Starting
6550 Sim over Total pop = 0 Tick Complete = 189
6551 Fitness = 551.6499999999953
6552 Ai: 6 Gen: 33
6553 Sim Starting
6554 Sim over Total pop = 0 Tick Complete = 992
6555 Fitness = 2410.289999999989
6556 Ai: 7 Gen: 33
6557 Sim Starting
6558 Sim over Total pop = 0 Tick Complete = 70
6559 Fitness = 962.0
6560 Ai: 8 Gen: 33
6561 Sim Starting
6562 Sim over Total pop = 0 Tick Complete = 357
6563 Fitness = 990.9000000000007
6564 Ai: 9 Gen: 33
6565 Sim Starting
```

```
6566 Sim over Total pop = 0 Tick Complete = 522
6567 Fitness = 1488.640000000024
6568 Ai: 10 Gen: 33
6569 Sim Starting
6570 Sim over Total pop = 0 Tick Complete = 328
6571 Fitness = 1335.8799999999942
6572 Ai: 11 Gen: 33
6573 Sim Starting
6574 Sim over Total pop = 2 Tick Complete = 2001
6575 Fitness = 2321.629999999971
6576 Ai: 12 Gen: 33
6577 Sim Starting
6578 Sim over Total pop = 0 Tick Complete = 79
6579 Fitness = 838.7099999999999
6580 Ai: 13 Gen: 33
6581 Sim Starting
6582 Sim over Total pop = 0 Tick Complete = 231
6583 Fitness = 678.589999999985
6584 Ai: 14 Gen: 33
6585 Sim Starting
6586 Sim over Total pop = 0 Tick Complete = 702
6587 Fitness = 1283.5899999999629
6588 Ai: 15 Gen: 33
6589 Sim Starting
6590 Sim over Total pop = 0 Tick Complete = 199
6591 Fitness = 507.95999999996883
6592 Ai: 16 Gen: 33
6593 Sim Starting
6594 Sim over Total pop = 0 Tick Complete = 335
6595 Fitness = 439.1399999998794
6596 Ai: 17 Gen: 33
6597 Sim Starting
6598 Sim over Total pop = 0 Tick Complete = 318
6599 Fitness = 1074.4399999999646
6600 Ai: 18 Gen: 33
6601 Sim Starting
6602 Sim over Total pop = 0 Tick Complete = 304
6603 Fitness = 1464.7199999999855
6604 Ai: 19 Gen: 33
6605 Sim Starting
6606 Sim over Total pop = 0 Tick Complete = 974
6607 Fitness = 1368.959999999976
6608 Ai: 20 Gen: 33
6609 Sim Starting
```

```
6610 Sim over Total pop = 0 Tick Complete = 255
6611 Fitness = 1658.8399999999815
6612 Ai: 21 Gen: 33
6613 Sim Starting
6614 Sim over Total pop = 0 Tick Complete = 92
6615 Fitness = 262.69999999998964
6616 Ai: 22 Gen: 33
6617 Sim Starting
6618 Sim over Total pop = 0 Tick Complete = 173
6619 Fitness = 983.3799999999836
6620 Ai: 23 Gen: 33
6621 Sim Starting
6622 Sim over Total pop = 0 Tick Complete = 70
6623 Fitness = 759.0
6624 Ai: 24 Gen: 33
6625 Sim Starting
6626 Sim over Total pop = 0 Tick Complete = 1291
6627 Fitness = 2525.4299999999657
6628 Ai: 25 Gen: 33
6629 Sim Starting
6630 Sim over Total pop = 0 Tick Complete = 142
6631 Fitness = 391.88999999998595
6632 Ai: 26 Gen: 33
6633 Sim Starting
6634 Sim over Total pop = 0 Tick Complete = 160
6635 Fitness = 972.0500000000018
6636 Ai: 27 Gen: 33
6637 Sim Starting
6638 Sim over Total pop = 0 Tick Complete = 213
6639 Fitness = 868.419999999954
6640 Ai: 28 Gen: 33
6641 Sim Starting
6642 Sim over Total pop = 0 Tick Complete = 64
6643 Fitness = 551.0599999999895
6644 Ai: 29 Gen: 33
6645 Sim Starting
6646 Sim over Total pop = 0 Tick Complete = 1678
6647 Fitness = 2819.7199999999684
6648 Ai: 30 Gen: 33
6649 Sim Starting
6650
6651 Name: 1
6652 X: 100
6653 Y: 647
```

```
6654 civpop: 6
6655 trooppop: 4
6656 rawresources: 2064.6000000000013
6657 equipment: 0
6658 rate: 1.2
6659 popraw: 0
6660 popequip: 0.5
6661 %TroopsSupplied: 89
6662
6663 Name: 3
6664 X: 735
6665 Y: 499
6666 civpop: 14
6667 trooppop: 11
6668 rawresources: 910.649999999962
6669 equipment: 0
6670 rate: 1.4
6671 popraw: 0
6672 popequip: 0.5
6673 %TroopsSupplied: 89
6674 Sim over Total pop = 0 Tick Complete = 738
6675 Fitness = 1643.229999999902
6676 Ai: 31 Gen: 33
6677 Sim Starting
6678 Sim over Total pop = 0 Tick Complete = 70
6679 Fitness = 891.0
6680 Ai: 32 Gen: 33
6681 Sim Starting
6682 Sim over Total pop = 0 Tick Complete = 708
6683 Fitness = 1617.869999999849
6684 Ai: 33 Gen: 33
6685 Sim Starting
6686 Sim over Total pop = 0 Tick Complete = 409
6687 Fitness = 1120.179999999894
6688 Ai: 34 Gen: 33
6689 Sim Starting
6690 Sim over Total pop = 0 Tick Complete = 348
6691 Fitness = 1713.019999999638
6692 Ai: 35 Gen: 33
6693 Sim Starting
6694 Sim over Total pop = 0 Tick Complete = 70
6695 Fitness = 906.0
6696 Ai: 36 Gen: 33
6697 Sim Starting
```

```
6698 Sim over Total pop = 0 Tick Complete = 1012
6699 Fitness = 1966.7199999999764
6700 Ai: 37 Gen: 33
6701 Sim Starting
6702 Sim over Total pop = 0 Tick Complete = 562
6703 Fitness = 1257.6399999999976
6704 Ai: 38 Gen: 33
6705 Sim Starting
6706 Sim over Total pop = 2 Tick Complete = 2001
6707 Fitness = 3753.1799999997743
6708 Ai: 39 Gen: 33
6709 Sim Starting
6710 Sim over Total pop = 0 Tick Complete = 53
6711 Fitness = 49.95999999994196
6712 Ai: 40 Gen: 33
6713 Sim Starting
6714
6715 Name: 1
6716 X: 402
6717 Y: 285
6718 civpop: 11
6719 trooppop: 8
6720 rawresources: 3846.5500000000734
6721 equipment: 0
6722 rate: 1.3
6723 popraw: 0
6724 popequip: 0.5
6725 %TroopsSupplied: 89
6726
6727 Name: 1
6728 X: 402
6729 Y: 285
6730 civpop: 11
6731 trooppop: 8
6732 rawresources: 2931.3500000000618
6733 equipment: 0
6734 rate: 1.3
6735 popraw: 0
6736 popequip: 0.5
6737 %TroopsSupplied: 89
6738
6739 Name: 1
6740 X: 402
6741 Y: 285
```

```
6742 civpop: 11
6743 trooppop: 8
6744 rawresources: 2731.150000000059
6745 equipment: 0
6746 rate: 1.3
6747 popraw: 0
6748 popequip: 0.5
6749 %TroopsSupplied: 89
6750
6751 Name: 1
6752 X: 402
6753 Y: 285
6754 civpop: 11
6755 trooppop: 8
6756 rawresources: 2516.6500000000565
6757 equipment: 0
6758 rate: 1.3
6759 popraw: 0
6760 popequip: 0.5
6761 %TroopsSupplied: 89
6762 Sim over Total pop = 0 Tick Complete = 965
6763 Fitness = 1496.979999999985
6764 Ai: 41 Gen: 33
6765 Sim Starting
6766 Sim over Total pop = 0 Tick Complete = 78
6767 Fitness = 209.13999999999356
6768 Ai: 42 Gen: 33
6769 Sim Starting
6770 Sim over Total pop = 0 Tick Complete = 194
6771 Fitness = 1240.8899999999956
6772 Ai: 43 Gen: 33
6773 Sim Starting
6774 Sim over Total pop = 0 Tick Complete = 925
6775 Fitness = 2081.259999999961
6776 Ai: 44 Gen: 33
6777 Sim Starting
6778 Sim over Total pop = 0 Tick Complete = 70
6779 Fitness = 825.0
6780 Ai: 45 Gen: 33
6781 Sim Starting
6782 Sim over Total pop = 0 Tick Complete = 176
6783 Fitness = 941.469999999996
6784 Ai: 46 Gen: 33
6785 Sim Starting
```

```
6786 Sim over Total pop = 0 Tick Complete = 196
6787 Fitness = 481.3199999999851
6788 Ai: 47 Gen: 33
6789 Sim Starting
6790 Sim over Total pop = 0 Tick Complete = 324
6791 Fitness = 833.6399999999683
6792 Ai: 48 Gen: 33
6793 Sim Starting
6794 Sim over Total pop = 0 Tick Complete = 112
6795 Fitness = 935.1199999999967
6796 Ai: 49 Gen: 33
6797 Sim Starting
6798 Sim over Total pop = 0 Tick Complete = 468
6799 Fitness = 1121.5499999999915
6800 Mean Fitness of Gen 33 is 1141.459399999813 and
best fitness 3753.1799999997743
6801 Ai: 0 Gen: 34
6802 Sim Starting
6803 Sim over Total pop = 0 Tick Complete = 577
6804 Fitness = 1778.2399999999548
6805 Ai: 1 Gen: 34
6806 Sim Starting
6807 Sim over Total pop = 0 Tick Complete = 82
6808 Fitness = 901.0899999999995
6809 Ai: 2 Gen: 34
6810 Sim Starting
6811 Sim over Total pop = 0 Tick Complete = 188
6812 Fitness = 909.3399999999971
6813 Ai: 3 Gen: 34
6814 Sim Starting
6815 Sim over Total pop = 0 Tick Complete = 194
6816 Fitness = 1338.669999999986
6817 Ai: 4 Gen: 34
6818 Sim Starting
6819 Sim over Total pop = 0 Tick Complete = 339
6820 Fitness = 1489.8099999999743
6821 Ai: 5 Gen: 34
6822 Sim Starting
6823 Sim over Total pop = 0 Tick Complete = 346
6824 Fitness = 1037.7999999999852
6825 Ai: 6 Gen: 34
6826 Sim Starting
6827 Sim over Total pop = 0 Tick Complete = 150
6828 Fitness = 1063.4999999999995
```

```
6829 Ai: 7 Gen: 34
6830 Sim Starting
6831 Sim over Total pop = 0 Tick Complete = 257
6832 Fitness = 928.1999999999981
6833 Ai: 8 Gen: 34
6834 Sim Starting
6835 Sim over Total pop = 0 Tick Complete = 107
6836 Fitness = 516.3799999999983
6837 Ai: 9 Gen: 34
6838 Sim Starting
6839 Sim over Total pop = 0 Tick Complete = 281
6840 Fitness = 1006.2000000000029
6841 Ai: 10 Gen: 34
6842 Sim Starting
6843 Sim over Total pop = 0 Tick Complete = 70
6844 Fitness = 693.0
6845 Ai: 11 Gen: 34
6846 Sim Starting
6847 Sim over Total pop = 0 Tick Complete = 771
6848 Fitness = 2033.01000000002
6849 Ai: 12 Gen: 34
6850 Sim Starting
6851 Sim over Total pop = 0 Tick Complete = 539
6852 Fitness = 1210.0300000000016
6853 Ai: 13 Gen: 34
6854 Sim Starting
6855 Sim over Total pop = 0 Tick Complete = 95
6856 Fitness = 795.4799999999889
6857 Ai: 14 Gen: 34
6858 Sim Starting
6859 Sim over Total pop = 0 Tick Complete = 216
6860 Fitness = 788.3499999999906
6861 Ai: 15 Gen: 34
6862 Sim Starting
6863 Sim over Total pop = 0 Tick Complete = 257
6864 Fitness = 1263.0199999999938
6865 Ai: 16 Gen: 34
6866 Sim Starting
6867 Sim over Total pop = 0 Tick Complete = 487
6868 Fitness = 1617.4699999999839
6869 Ai: 17 Gen: 34
6870 Sim Starting
6871 Sim over Total pop = 0 Tick Complete = 672
6872 Fitness = 1382.9599999999955
```

```
6873 Ai: 18 Gen: 34
6874 Sim Starting
6875 Sim over Total pop = 0 Tick Complete = 212
6876 Fitness = 596.8499999999965
6877 Ai: 19 Gen: 34
6878 Sim Starting
6879 Sim over Total pop = 0 Tick Complete = 70
6880 Fitness = 764.0
6881 Ai: 20 Gen: 34
6882 Sim Starting
6883 Sim over Total pop = 0 Tick Complete = 70
6884 Fitness = 693.0
6885 Ai: 21 Gen: 34
6886 Sim Starting
6887 Sim over Total pop = 0 Tick Complete = 210
6888 Fitness = 1057.489999999997
6889 Ai: 22 Gen: 34
6890 Sim Starting
6891 Sim over Total pop = 0 Tick Complete = 92
6892 Fitness = 601.5299999999978
6893 Ai: 23 Gen: 34
6894 Sim Starting
6895 Sim over Total pop = 0 Tick Complete = 58
6896 Fitness = 101.17999999999728
6897 Ai: 24 Gen: 34
6898 Sim Starting
6899 Sim over Total pop = 0 Tick Complete = 70
6900 Fitness = 769.0
6901 Ai: 25 Gen: 34
6902 Sim Starting
6903 Sim over Total pop = 0 Tick Complete = 195
6904 Fitness = 957.4499999999828
6905 Ai: 26 Gen: 34
6906 Sim Starting
6907 Sim over Total pop = 0 Tick Complete = 171
6908 Fitness = 1219.7800000000002
6909 Ai: 27 Gen: 34
6910 Sim Starting
6911 Sim over Total pop = 0 Tick Complete = 119
6912 Fitness = 437.98999999998864
6913 Ai: 28 Gen: 34
6914 Sim Starting
6915 Sim over Total pop = 0 Tick Complete = 798
6916 Fitness = 1735.7499999999889
```

```
6917 Ai: 29 Gen: 34
6918 Sim Starting
6919 Sim over Total pop = 0 Tick Complete = 86
6920 Fitness = 273.449999999864
6921 Ai: 30 Gen: 34
6922 Sim Starting
6923 Sim over Total pop = 0 Tick Complete = 187
6924 Fitness = 666.65999999982
6925 Ai: 31 Gen: 34
6926 Sim Starting
6927 Sim over Total pop = 0 Tick Complete = 631
6928 Fitness = 1054.67999999944
6929 Ai: 32 Gen: 34
6930 Sim Starting
6931 Sim over Total pop = 0 Tick Complete = 189
6932 Fitness = 798.329999999779
6933 Ai: 33 Gen: 34
6934 Sim Starting
6935 Sim over Total pop = 0 Tick Complete = 64
6936 Fitness = 83.0099999999392
6937 Ai: 34 Gen: 34
6938 Sim Starting
6939 Sim over Total pop = 2 Tick Complete = 2001
6940 Fitness = 2600.899999998623
6941 Ai: 35 Gen: 34
6942 Sim Starting
6943 Sim over Total pop = 0 Tick Complete = 201
6944 Fitness = 269.249999999906
6945 Ai: 36 Gen: 34
6946 Sim Starting
6947 Sim over Total pop = 0 Tick Complete = 604
6948 Fitness = 1394.20999999959
6949 Ai: 37 Gen: 34
6950 Sim Starting
6951 Sim over Total pop = 0 Tick Complete = 61
6952 Fitness = 556.079999999915
6953 Ai: 38 Gen: 34
6954 Sim Starting
6955 Sim over Total pop = 0 Tick Complete = 201
6956 Fitness = 697.519999999907
6957 Ai: 39 Gen: 34
6958 Sim Starting
6959 Sim over Total pop = 0 Tick Complete = 1017
6960 Fitness = 1773.299999999874
```

```
6961 Ai: 40 Gen: 34
6962 Sim Starting
6963 Sim over Total pop = 0 Tick Complete = 292
6964 Fitness = 872.4999999999837
6965 Ai: 41 Gen: 34
6966 Sim Starting
6967 Sim over Total pop = 0 Tick Complete = 1810
6968 Fitness = 2313.539999999995
6969 Ai: 42 Gen: 34
6970 Sim Starting
6971 Sim over Total pop = 0 Tick Complete = 314
6972 Fitness = 1165.599999999945
6973 Ai: 43 Gen: 34
6974 Sim Starting
6975 Sim over Total pop = 0 Tick Complete = 1182
6976 Fitness = 1838.6399999999587
6977 Ai: 44 Gen: 34
6978 Sim Starting
6979 Sim over Total pop = 0 Tick Complete = 535
6980 Fitness = 1968.9099999999628
6981 Ai: 45 Gen: 34
6982 Sim Starting
6983 Sim over Total pop = 2 Tick Complete = 2001
6984 Fitness = 4000.9699999999534
6985 Ai: 46 Gen: 34
6986 Sim Starting
6987 Sim over Total pop = 0 Tick Complete = 384
6988 Fitness = 903.9399999999911
6989 Ai: 47 Gen: 34
6990 Sim Starting
6991 Sim over Total pop = 0 Tick Complete = 290
6992 Fitness = 983.5299999999913
6993 Ai: 48 Gen: 34
6994 Sim Starting
6995 Sim over Total pop = 0 Tick Complete = 1762
6996 Fitness = 2583.40000000005
6997 Mean Fitness of Gen 34 is 1152.754897959169 and
best fitness 4000.9699999999534
6998 Ai: 0 Gen: 35
6999 Sim Starting
7000 Sim over Total pop = 0 Tick Complete = 66
7001 Fitness = 157.56999999999738
7002 Ai: 1 Gen: 35
7003 Sim Starting
```

```
7004 Sim over Total pop = 0 Tick Complete = 81
7005 Fitness = 207.8999999999997
7006 Ai: 2 Gen: 35
7007 Sim Starting
7008 Sim over Total pop = 0 Tick Complete = 70
7009 Fitness = 759.0
7010 Ai: 3 Gen: 35
7011 Sim Starting
7012 Sim over Total pop = 0 Tick Complete = 70
7013 Fitness = 835.0
7014 Ai: 4 Gen: 35
7015 Sim Starting
7016 Sim over Total pop = 0 Tick Complete = 377
7017 Fitness = 1541.1600000000008
7018 Ai: 5 Gen: 35
7019 Sim Starting
7020 Sim over Total pop = 0 Tick Complete = 65
7021 Fitness = 158.77999999999753
7022 Ai: 6 Gen: 35
7023 Sim Starting
7024 Sim over Total pop = 0 Tick Complete = 65
7025 Fitness = 219.84999999999718
7026 Ai: 7 Gen: 35
7027 Sim Starting
7028 Sim over Total pop = 0 Tick Complete = 65
7029 Fitness = 714.0799999999927
7030 Ai: 8 Gen: 35
7031 Sim Starting
7032 Sim over Total pop = 0 Tick Complete = 428
7033 Fitness = 1036.8299999999842
7034 Ai: 9 Gen: 35
7035 Sim Starting
7036 Sim over Total pop = 5 Tick Complete = 2001
7037 Fitness = 2577.0799999999836
7038 Ai: 10 Gen: 35
7039 Sim Starting
7040 Sim over Total pop = 0 Tick Complete = 119
7041 Fitness = 863.8299999999886
7042 Ai: 11 Gen: 35
7043 Sim Starting
7044 Sim over Total pop = 0 Tick Complete = 1174
7045 Fitness = 1716.2299999999382
7046 Ai: 12 Gen: 35
7047 Sim Starting
```

```
7048 Sim over Total pop = 0 Tick Complete = 70
7049 Fitness = 830.0999999999999
7050 Ai: 13 Gen: 35
7051 Sim Starting
7052 Sim over Total pop = 0 Tick Complete = 75
7053 Fitness = 838.6399999999945
7054 Ai: 14 Gen: 35
7055 Sim Starting
7056 Sim over Total pop = 0 Tick Complete = 448
7057 Fitness = 1030.1699999999764
7058 Ai: 15 Gen: 35
7059 Sim Starting
7060 Sim over Total pop = 0 Tick Complete = 70
7061 Fitness = 896.0
7062 Ai: 16 Gen: 35
7063 Sim Starting
7064 Sim over Total pop = 0 Tick Complete = 592
7065 Fitness = 1543.850000000026
7066 Ai: 17 Gen: 35
7067 Sim Starting
7068 Sim over Total pop = 0 Tick Complete = 70
7069 Fitness = 693.0
7070 Ai: 18 Gen: 35
7071 Sim Starting
7072 Sim over Total pop = 0 Tick Complete = 273
7073 Fitness = 662.2299999999752
7074 Ai: 19 Gen: 35
7075 Sim Starting
7076 Sim over Total pop = 0 Tick Complete = 69
7077 Fitness = 679.4899999999917
7078 Ai: 20 Gen: 35
7079 Sim Starting
7080 Sim over Total pop = 0 Tick Complete = 503
7081 Fitness = 952.659999999916
7082 Ai: 21 Gen: 35
7083 Sim Starting
7084 Sim over Total pop = 0 Tick Complete = 587
7085 Fitness = 1124.4200000000073
7086 Ai: 22 Gen: 35
7087 Sim Starting
7088 Sim over Total pop = 0 Tick Complete = 532
7089 Fitness = 1249.5699999999902
7090 Ai: 23 Gen: 35
7091 Sim Starting
```

```
7092 Sim over Total pop = 0 Tick Complete = 608
7093 Fitness = 1501.7799999999934
7094 Ai: 24 Gen: 35
7095 Sim Starting
7096 Sim over Total pop = 0 Tick Complete = 61
7097 Fitness = 142.7099999999976
7098 Ai: 25 Gen: 35
7099 Sim Starting
7100 Sim over Total pop = 0 Tick Complete = 344
7101 Fitness = 1386.1499999999726
7102 Ai: 26 Gen: 35
7103 Sim Starting
7104 Sim over Total pop = 0 Tick Complete = 260
7105 Fitness = 676.579999999979
7106 Ai: 27 Gen: 35
7107 Sim Starting
7108 Sim over Total pop = 0 Tick Complete = 1024
7109 Fitness = 1830.4799999999877
7110 Ai: 28 Gen: 35
7111 Sim Starting
7112 Sim over Total pop = 0 Tick Complete = 284
7113 Fitness = 1597.2799999999847
7114 Ai: 29 Gen: 35
7115 Sim Starting
7116 Sim over Total pop = 0 Tick Complete = 156
7117 Fitness = 369.7899999999924
7118 Ai: 30 Gen: 35
7119 Sim Starting
7120 Sim over Total pop = 0 Tick Complete = 770
7121 Fitness = 1453.209999999945
7122 Ai: 31 Gen: 35
7123 Sim Starting
7124 Sim over Total pop = 0 Tick Complete = 329
7125 Fitness = 1501.909999999976
7126 Ai: 32 Gen: 35
7127 Sim Starting
7128 Sim over Total pop = 0 Tick Complete = 113
7129 Fitness = 757.989999999951
7130 Ai: 33 Gen: 35
7131 Sim Starting
7132 Sim over Total pop = 0 Tick Complete = 122
7133 Fitness = 778.629999999993
7134 Ai: 34 Gen: 35
7135 Sim Starting
```

```
7136 Sim over Total pop = 0 Tick Complete = 1652
7137 Fitness = 2461.259999999911
7138 Ai: 35 Gen: 35
7139 Sim Starting
7140 Sim over Total pop = 0 Tick Complete = 1083
7141 Fitness = 2631.210000000153
7142 Ai: 36 Gen: 35
7143 Sim Starting
7144 Sim over Total pop = 0 Tick Complete = 949
7145 Fitness = 2101.259999999972
7146 Ai: 37 Gen: 35
7147 Sim Starting
7148 Sim over Total pop = 3 Tick Complete = 2001
7149 Fitness = 2977.6700000000915
7150 Ai: 38 Gen: 35
7151 Sim Starting
7152 Sim over Total pop = 0 Tick Complete = 900
7153 Fitness = 2429.930000000086
7154 Ai: 39 Gen: 35
7155 Sim Starting
7156 Sim over Total pop = 0 Tick Complete = 901
7157 Fitness = 3010.9400000000987
7158 Ai: 40 Gen: 35
7159 Sim Starting
7160 Sim over Total pop = 0 Tick Complete = 1253
7161 Fitness = 2280.4099999999244
7162 Ai: 41 Gen: 35
7163 Sim Starting
7164 Sim over Total pop = 2 Tick Complete = 2001
7165 Fitness = 4053.5199999999027
7166 Ai: 42 Gen: 35
7167 Sim Starting
7168 Sim over Total pop = 0 Tick Complete = 1652
7169 Fitness = 4389.739999999677
7170 Ai: 43 Gen: 35
7171 Sim Starting
7172 Sim over Total pop = 2 Tick Complete = 2001
7173 Fitness = 4323.939999999908
7174 Ai: 44 Gen: 35
7175 Sim Starting
7176 Sim over Total pop = 0 Tick Complete = 1080
7177 Fitness = 1215.6599999999983
7178 Ai: 45 Gen: 35
7179 Sim Starting
```

```
7180 Sim over Total pop = 4 Tick Complete = 2001
7181 Fitness = 2408.980000000041
7182 Ai: 46 Gen: 35
7183 Sim Starting
7184 Sim over Total pop = 0 Tick Complete = 857
7185 Fitness = 2592.7000000000326
7186 Ai: 47 Gen: 35
7187 Sim Starting
7188 Sim over Total pop = 0 Tick Complete = 51
7189 Fitness = 41.6199999999929
7190 Ai: 48 Gen: 35
7191 Sim Starting
7192 Sim over Total pop = 0 Tick Complete = 1400
7193 Fitness = 1663.9099999999685
7194 Ai: 49 Gen: 35
7195 Sim Starting
7196 Sim over Total pop = 0 Tick Complete = 208
7197 Fitness = 329.6799999999755
7198 Mean Fitness of Gen 35 is 1443.927599999868 and
best fitness 4389.739999999677
7199 Ai: 0 Gen: 36
7200 Sim Starting
7201 Sim over Total pop = 0 Tick Complete = 102
7202 Fitness = 876.0099999999932
7203 Ai: 1 Gen: 36
7204 Sim Starting
7205 Sim over Total pop = 0 Tick Complete = 188
7206 Fitness = 861.3299999999933
7207 Ai: 2 Gen: 36
7208 Sim Starting
7209 Sim over Total pop = 0 Tick Complete = 70
7210 Fitness = 764.0
7211 Ai: 3 Gen: 36
7212 Sim Starting
7213 Sim over Total pop = 0 Tick Complete = 512
7214 Fitness = 1696.9099999999885
7215 Ai: 4 Gen: 36
7216 Sim Starting
7217 Sim over Total pop = 0 Tick Complete = 70
7218 Fitness = 1028.0
7219 Ai: 5 Gen: 36
7220 Sim Starting
7221 Sim over Total pop = 0 Tick Complete = 65
7222 Fitness = 296.339999999997
```

```
7223 Ai: 6 Gen: 36
7224 Sim Starting
7225 Sim over Total pop = 0 Tick Complete = 70
7226 Fitness = 962.0
7227 Ai: 7 Gen: 36
7228 Sim Starting
7229 Sim over Total pop = 0 Tick Complete = 70
7230 Fitness = 830.0
7231 Ai: 8 Gen: 36
7232 Sim Starting
7233 Sim over Total pop = 0 Tick Complete = 70
7234 Fitness = 962.0
7235 Ai: 9 Gen: 36
7236 Sim Starting
7237 Sim over Total pop = 0 Tick Complete = 120
7238 Fitness = 870.459999999997
7239 Ai: 10 Gen: 36
7240 Sim Starting
7241 Sim over Total pop = 0 Tick Complete = 123
7242 Fitness = 820.6999999999957
7243 Ai: 11 Gen: 36
7244 Sim Starting
7245 Sim over Total pop = 0 Tick Complete = 480
7246 Fitness = 1328.7399999999952
7247 Ai: 12 Gen: 36
7248 Sim Starting
7249 Sim over Total pop = 0 Tick Complete = 383
7250 Fitness = 1923.549999999997
7251 Ai: 13 Gen: 36
7252 Sim Starting
7253 Sim over Total pop = 0 Tick Complete = 89
7254 Fitness = 973.8999999999988
7255 Ai: 14 Gen: 36
7256 Sim Starting
7257 Sim over Total pop = 0 Tick Complete = 70
7258 Fitness = 835.0
7259 Ai: 15 Gen: 36
7260 Sim Starting
7261 Sim over Total pop = 0 Tick Complete = 313
7262 Fitness = 1835.820000000027
7263 Ai: 16 Gen: 36
7264 Sim Starting
7265 Sim over Total pop = 0 Tick Complete = 341
7266 Fitness = 1087.5899999999933
```

```
7267 Ai: 17 Gen: 36
7268 Sim Starting
7269 Sim over Total pop = 0 Tick Complete = 152
7270 Fitness = 1009.7
7271 Ai: 18 Gen: 36
7272 Sim Starting
7273 Sim over Total pop = 0 Tick Complete = 147
7274 Fitness = 890.9700000000018
7275 Ai: 19 Gen: 36
7276 Sim Starting
7277 Sim over Total pop = 0 Tick Complete = 70
7278 Fitness = 825.1599999999999
7279 Ai: 20 Gen: 36
7280 Sim Starting
7281 Sim over Total pop = 0 Tick Complete = 61
7282 Fitness = 528.8699999999997
7283 Ai: 21 Gen: 36
7284 Sim Starting
7285 Sim over Total pop = 0 Tick Complete = 210
7286 Fitness = 1017.7199999999884
7287 Ai: 22 Gen: 36
7288 Sim Starting
7289 Sim over Total pop = 0 Tick Complete = 1182
7290 Fitness = 1764.7899999999595
7291 Ai: 23 Gen: 36
7292 Sim Starting
7293 Sim over Total pop = 0 Tick Complete = 427
7294 Fitness = 1184.7100000000046
7295 Ai: 24 Gen: 36
7296 Sim Starting
7297 Sim over Total pop = 0 Tick Complete = 445
7298 Fitness = 1014.4099999999959
7299 Ai: 25 Gen: 36
7300 Sim Starting
7301 Sim over Total pop = 0 Tick Complete = 468
7302 Fitness = 1249.2899999999731
7303 Ai: 26 Gen: 36
7304 Sim Starting
7305 Sim over Total pop = 0 Tick Complete = 129
7306 Fitness = 786.5399999999872
7307 Ai: 27 Gen: 36
7308 Sim Starting
7309 Sim over Total pop = 0 Tick Complete = 1234
7310 Fitness = 1893.609999999907
```

```
7311 Ai: 28 Gen: 36
7312 Sim Starting
7313 Sim over Total pop = 0 Tick Complete = 112
7314 Fitness = 626.2099999999842
7315 Ai: 29 Gen: 36
7316 Sim Starting
7317 Sim over Total pop = 0 Tick Complete = 166
7318 Fitness = 805.0799999999771
7319 Ai: 30 Gen: 36
7320 Sim Starting
7321 Sim over Total pop = 0 Tick Complete = 217
7322 Fitness = 975.8999999999984
7323 Ai: 31 Gen: 36
7324 Sim Starting
7325 Sim over Total pop = 0 Tick Complete = 290
7326 Fitness = 472.3499999999828
7327 Ai: 32 Gen: 36
7328 Sim Starting
7329 Sim over Total pop = 0 Tick Complete = 594
7330 Fitness = 1854.480000000017
7331 Ai: 33 Gen: 36
7332 Sim Starting
7333 Sim over Total pop = 0 Tick Complete = 917
7334 Fitness = 1717.4999999999877
7335 Ai: 34 Gen: 36
7336 Sim Starting
7337 Sim over Total pop = 0 Tick Complete = 1750
7338 Fitness = 2272.3699999999785
7339 Ai: 35 Gen: 36
7340 Sim Starting
7341 Sim over Total pop = 0 Tick Complete = 70
7342 Fitness = 1048.0
7343 Ai: 36 Gen: 36
7344 Sim Starting
7345 Sim over Total pop = 4 Tick Complete = 2001
7346 Fitness = 3818.5899999997414
7347 Ai: 37 Gen: 36
7348 Sim Starting
7349 Sim over Total pop = 0 Tick Complete = 1481
7350 Fitness = 1727.4299999999598
7351 Ai: 38 Gen: 36
7352 Sim Starting
7353 Sim over Total pop = 0 Tick Complete = 164
7354 Fitness = 756.1399999999918
```

```
7355 Ai: 39 Gen: 36
7356 Sim Starting
7357 Sim over Total pop = 0 Tick Complete = 59
7358 Fitness = 270.5799999999945
7359 Ai: 40 Gen: 36
7360 Sim Starting
7361 Sim over Total pop = 0 Tick Complete = 744
7362 Fitness = 1211.9399999999946
7363 Ai: 41 Gen: 36
7364 Sim Starting
7365 Sim over Total pop = 0 Tick Complete = 56
7366 Fitness = 118.68999999999315
7367 Ai: 42 Gen: 36
7368 Sim Starting
7369 Sim over Total pop = 0 Tick Complete = 1074
7370 Fitness = 2639.3399999999874
7371 Ai: 43 Gen: 36
7372 Sim Starting
7373 Sim over Total pop = 0 Tick Complete = 264
7374 Fitness = 530.7499999999654
7375 Ai: 44 Gen: 36
7376 Sim Starting
7377 Sim over Total pop = 0 Tick Complete = 53
7378 Fitness = 161.2499999999941
7379 Ai: 45 Gen: 36
7380 Sim Starting
7381 Sim over Total pop = 0 Tick Complete = 66
7382 Fitness = 138.34999999999633
7383 Ai: 46 Gen: 36
7384 Sim Starting
7385 Sim over Total pop = 4 Tick Complete = 2001
7386 Fitness = 5865.010000000154
7387 Ai: 47 Gen: 36
7388 Sim Starting
7389 Sim over Total pop = 0 Tick Complete = 183
7390 Fitness = 947.6999999999898
7391 Ai: 48 Gen: 36
7392 Sim Starting
7393 Sim over Total pop = 2 Tick Complete = 2001
7394 Fitness = 2324.6999999999966
7395 Ai: 49 Gen: 36
7396 Sim Starting
7397 Sim over Total pop = 2 Tick Complete = 2001
7398 Fitness = 3753.7099999997604
```

```
7399 Ai: 50 Gen: 36
7400 Sim Starting
7401 Sim over Total pop = 0 Tick Complete = 55
7402 Fitness = 18.2999999999383
7403 Mean Fitness of Gen 36 is 1258.284117647043 and
    best fitness 5865.010000000154
7404 Ai: 0 Gen: 37
7405 Sim Starting
7406 Sim over Total pop = 0 Tick Complete = 191
7407 Fitness = 802.1199999999897
7408 Ai: 1 Gen: 37
7409 Sim Starting
7410 Sim over Total pop = 0 Tick Complete = 70
7411 Fitness = 896.0
7412 Ai: 2 Gen: 37
7413 Sim Starting
7414 Sim over Total pop = 9 Tick Complete = 2001
7415 Fitness = 3630.6599999999307
7416 Ai: 3 Gen: 37
7417 Sim Starting
7418 Sim over Total pop = 0 Tick Complete = 188
7419 Fitness = 1062.2299999999943
7420 Ai: 4 Gen: 37
7421 Sim Starting
7422 Sim over Total pop = 0 Tick Complete = 125
7423 Fitness = 764.2199999999931
7424 Ai: 5 Gen: 37
7425 Sim Starting
7426 Sim over Total pop = 0 Tick Complete = 346
7427 Fitness = 1024.6099999999667
7428 Ai: 6 Gen: 37
7429 Sim Starting
7430 Sim over Total pop = 0 Tick Complete = 63
7431 Fitness = 285.1399999999928
7432 Ai: 7 Gen: 37
7433 Sim Starting
7434 Sim over Total pop = 0 Tick Complete = 125
7435 Fitness = 710.8499999999901
7436 Ai: 8 Gen: 37
7437 Sim Starting
7438 Sim over Total pop = 0 Tick Complete = 84
7439 Fitness = 165.44999999999342
7440 Ai: 9 Gen: 37
7441 Sim Starting
```

```
7442 Sim over Total pop = 0 Tick Complete = 477
7443 Fitness = 701.9099999999755
7444 Ai: 10 Gen: 37
7445 Sim Starting
7446 Sim over Total pop = 0 Tick Complete = 68
7447 Fitness = 491.14999999999196
7448 Ai: 11 Gen: 37
7449 Sim Starting
7450 Sim over Total pop = 0 Tick Complete = 122
7451 Fitness = 341.33999999999395
7452 Ai: 12 Gen: 37
7453 Sim Starting
7454 Sim over Total pop = 0 Tick Complete = 148
7455 Fitness = 945.119999999991
7456 Ai: 13 Gen: 37
7457 Sim Starting
7458 Sim over Total pop = 0 Tick Complete = 95
7459 Fitness = 661.7099999999907
7460 Ai: 14 Gen: 37
7461 Sim Starting
7462 Sim over Total pop = 0 Tick Complete = 267
7463 Fitness = 716.499999999845
7464 Ai: 15 Gen: 37
7465 Sim Starting
7466 Sim over Total pop = 0 Tick Complete = 113
7467 Fitness = 391.4199999999848
7468 Ai: 16 Gen: 37
7469 Sim Starting
7470 Sim over Total pop = 0 Tick Complete = 83
7471 Fitness = 712.6699999999905
7472 Ai: 17 Gen: 37
7473 Sim Starting
7474 Sim over Total pop = 0 Tick Complete = 97
7475 Fitness = 743.6099999999917
7476 Ai: 18 Gen: 37
7477 Sim Starting
7478 Sim over Total pop = 0 Tick Complete = 75
7479 Fitness = 166.87999999999028
7480 Ai: 19 Gen: 37
7481 Sim Starting
7482 Sim over Total pop = 0 Tick Complete = 124
7483 Fitness = 815.96999999999
7484 Ai: 20 Gen: 37
7485 Sim Starting
```

```
7486 Sim over Total pop = 0 Tick Complete = 318
7487 Fitness = 644.1399999999746
7488 Ai: 21 Gen: 37
7489 Sim Starting
7490 Sim over Total pop = 0 Tick Complete = 475
7491 Fitness = 2164.8400000000097
7492 Ai: 22 Gen: 37
7493 Sim Starting
7494 Sim over Total pop = 0 Tick Complete = 531
7495 Fitness = 1457.0999999999647
7496 Ai: 23 Gen: 37
7497 Sim Starting
7498 Sim over Total pop = 0 Tick Complete = 193
7499 Fitness = 441.8599999999913
7500 Ai: 24 Gen: 37
7501 Sim Starting
7502 Sim over Total pop = 0 Tick Complete = 449
7503 Fitness = 933.3699999999867
7504 Ai: 25 Gen: 37
7505 Sim Starting
7506 Sim over Total pop = 0 Tick Complete = 100
7507 Fitness = 273.3999999999879
7508 Ai: 26 Gen: 37
7509 Sim Starting
7510 Sim over Total pop = 0 Tick Complete = 116
7511 Fitness = 692.8899999999791
7512 Ai: 27 Gen: 37
7513 Sim Starting
7514 Sim over Total pop = 0 Tick Complete = 416
7515 Fitness = 1205.4999999999777
7516 Ai: 28 Gen: 37
7517 Sim Starting
7518 Sim over Total pop = 0 Tick Complete = 501
7519 Fitness = 1650.3699999999665
7520 Ai: 29 Gen: 37
7521 Sim Starting
7522 Sim over Total pop = 0 Tick Complete = 177
7523 Fitness = 519.1699999999953
7524 Ai: 30 Gen: 37
7525 Sim Starting
7526 Sim over Total pop = 0 Tick Complete = 88
7527 Fitness = 188.72999999999664
7528 Ai: 31 Gen: 37
7529 Sim Starting
```

```
7530 Sim over Total pop = 0 Tick Complete = 337
7531 Fitness = 1493.8199999999965
7532 Ai: 32 Gen: 37
7533 Sim Starting
7534 Sim over Total pop = 0 Tick Complete = 138
7535 Fitness = 379.8699999999925
7536 Ai: 33 Gen: 37
7537 Sim Starting
7538 Sim over Total pop = 0 Tick Complete = 1450
7539 Fitness = 3710.3199999999315
7540 Ai: 34 Gen: 37
7541 Sim Starting
7542 Sim over Total pop = 0 Tick Complete = 1255
7543 Fitness = 1501.4899999999307
7544 Ai: 35 Gen: 37
7545 Sim Starting
7546 Sim over Total pop = 0 Tick Complete = 1350
7547 Fitness = 2332.7699999999872
7548 Ai: 36 Gen: 37
7549 Sim Starting
7550 Sim over Total pop = 0 Tick Complete = 1188
7551 Fitness = 2309.9799999999973
7552 Ai: 37 Gen: 37
7553 Sim Starting
7554 Sim over Total pop = 2 Tick Complete = 2001
7555 Fitness = 2215.359999999974
7556 Ai: 38 Gen: 37
7557 Sim Starting
7558 Sim over Total pop = 3 Tick Complete = 2001
7559 Fitness = 3475.9899999999975
7560 Ai: 39 Gen: 37
7561 Sim Starting
7562 Sim over Total pop = 0 Tick Complete = 1203
7563 Fitness = 3012.60999999998
7564 Ai: 40 Gen: 37
7565 Sim Starting
7566 Sim over Total pop = 5 Tick Complete = 2001
7567 Fitness = 3224.5499999999865
7568 Ai: 41 Gen: 37
7569 Sim Starting
7570 Sim over Total pop = 0 Tick Complete = 923
7571 Fitness = 2224.0099999997983
7572 Ai: 42 Gen: 37
7573 Sim Starting
```

```
7574 Sim over Total pop = 0 Tick Complete = 51
7575 Fitness = 0.9499999999912063
7576 Ai: 43 Gen: 37
7577 Sim Starting
7578 Sim over Total pop = 0 Tick Complete = 50
7579 Fitness = 18.769999999993665
7580 Ai: 44 Gen: 37
7581 Sim Starting
7582 Sim over Total pop = 0 Tick Complete = 84
7583 Fitness = 115.96999999999817
7584 Ai: 45 Gen: 37
7585 Sim Starting
7586 Sim over Total pop = 0 Tick Complete = 1832
7587 Fitness = 5560.329999999598
7588 Ai: 46 Gen: 37
7589 Sim Starting
7590 Sim over Total pop = 0 Tick Complete = 587
7591 Fitness = 775.469999999636
7592 Ai: 47 Gen: 37
7593 Sim Starting
7594 Sim over Total pop = 0 Tick Complete = 116
7595 Fitness = 697.419999999845
7596 Ai: 48 Gen: 37
7597 Sim Starting
7598 Sim over Total pop = 0 Tick Complete = 1399
7599 Fitness = 3749.779999999784
7600 Ai: 49 Gen: 37
7601 Sim Starting
7602 Sim over Total pop = 0 Tick Complete = 912
7603 Fitness = 1132.369999999898
7604 Ai: 50 Gen: 37
7605 Sim Starting
7606 Sim over Total pop = 0 Tick Complete = 1724
7607 Fitness = 2714.70999999998
7608 Mean Fitness of Gen 37 is 1310.7347058823202 and
    best fitness 5560.329999999598
7609 Ai: 0 Gen: 38
7610 Sim Starting
7611 Sim over Total pop = 0 Tick Complete = 431
7612 Fitness = 1574.579999999968
7613 Ai: 1 Gen: 38
7614 Sim Starting
7615 Sim over Total pop = 0 Tick Complete = 307
7616 Fitness = 1099.7699999999863
```

```
7617 Ai: 2 Gen: 38
7618 Sim Starting
7619 Sim over Total pop = 0 Tick Complete = 66
7620 Fitness = 136.73999999999384
7621 Ai: 3 Gen: 38
7622 Sim Starting
7623 Sim over Total pop = 0 Tick Complete = 266
7624 Fitness = 1456.9499999999953
7625 Ai: 4 Gen: 38
7626 Sim Starting
7627 Sim over Total pop = 0 Tick Complete = 229
7628 Fitness = 1353.8999999999912
7629 Ai: 5 Gen: 38
7630 Sim Starting
7631 Sim over Total pop = 3 Tick Complete = 2001
7632 Fitness = 3187.7500000001446
7633 Ai: 6 Gen: 38
7634 Sim Starting
7635 Sim over Total pop = 0 Tick Complete = 146
7636 Fitness = 366.5599999999891
7637 Ai: 7 Gen: 38
7638 Sim Starting
7639 Sim over Total pop = 0 Tick Complete = 299
7640 Fitness = 1221.4599999999875
7641 Ai: 8 Gen: 38
7642 Sim Starting
7643 Sim over Total pop = 0 Tick Complete = 530
7644 Fitness = 1454.1499999999537
7645 Ai: 9 Gen: 38
7646 Sim Starting
7647 Sim over Total pop = 0 Tick Complete = 546
7648 Fitness = 1235.129999999961
7649 Ai: 10 Gen: 38
7650 Sim Starting
7651 Sim over Total pop = 0 Tick Complete = 123
7652 Fitness = 880.7099999999887
7653 Ai: 11 Gen: 38
7654 Sim Starting
7655 Sim over Total pop = 0 Tick Complete = 118
7656 Fitness = 509.9499999999931
7657 Ai: 12 Gen: 38
7658 Sim Starting
7659 Sim over Total pop = 0 Tick Complete = 172
7660 Fitness = 1001.5199999999869
```

```
7661 Ai: 13 Gen: 38
7662 Sim Starting
7663 Sim over Total pop = 0 Tick Complete = 262
7664 Fitness = 865.4099999999926
7665 Ai: 14 Gen: 38
7666 Sim Starting
7667 Sim over Total pop = 0 Tick Complete = 197
7668 Fitness = 1192.2399999999977
7669 Ai: 15 Gen: 38
7670 Sim Starting
7671 Sim over Total pop = 0 Tick Complete = 73
7672 Fitness = 146.7699999999972
7673 Ai: 16 Gen: 38
7674 Sim Starting
7675 Sim over Total pop = 0 Tick Complete = 84
7676 Fitness = 652.429999999992
7677 Ai: 17 Gen: 38
7678 Sim Starting
7679 Sim over Total pop = 0 Tick Complete = 542
7680 Fitness = 1335.3199999999788
7681 Ai: 18 Gen: 38
7682 Sim Starting
7683 Sim over Total pop = 0 Tick Complete = 70
7684 Fitness = 896.0
7685 Ai: 19 Gen: 38
7686 Sim Starting
7687 Sim over Total pop = 0 Tick Complete = 70
7688 Fitness = 698.0
7689 Ai: 20 Gen: 38
7690 Sim Starting
7691 Sim over Total pop = 0 Tick Complete = 62
7692 Fitness = 590.4999999999899
7693 Ai: 21 Gen: 38
7694 Sim Starting
7695 Sim over Total pop = 0 Tick Complete = 70
7696 Fitness = 957.0
7697 Ai: 22 Gen: 38
7698 Sim Starting
7699 Sim over Total pop = 0 Tick Complete = 160
7700 Fitness = 781.3799999999932
7701 Ai: 23 Gen: 38
7702 Sim Starting
7703 Sim over Total pop = 0 Tick Complete = 65
7704 Fitness = 358.9799999999908
```

```
7705 Ai: 24 Gen: 38
7706 Sim Starting
7707 Sim over Total pop = 0 Tick Complete = 68
7708 Fitness = 697.7899999999901
7709 Ai: 25 Gen: 38
7710 Sim Starting
7711 Sim over Total pop = 0 Tick Complete = 70
7712 Fitness = 967.0
7713 Ai: 26 Gen: 38
7714 Sim Starting
7715 Sim over Total pop = 0 Tick Complete = 882
7716 Fitness = 1002.6299999999849
7717 Ai: 27 Gen: 38
7718 Sim Starting
7719 Sim over Total pop = 0 Tick Complete = 1452
7720 Fitness = 2355.0300000000125
7721 Ai: 28 Gen: 38
7722 Sim Starting
7723 Sim over Total pop = 2 Tick Complete = 2001
7724 Fitness = 3456.569999999824
7725 Ai: 29 Gen: 38
7726 Sim Starting
7727 Sim over Total pop = 0 Tick Complete = 51
7728 Fitness = 75.2599999999925
7729 Ai: 30 Gen: 38
7730 Sim Starting
7731 Sim over Total pop = 0 Tick Complete = 1538
7732 Fitness = 3637.8200000001993
7733 Ai: 31 Gen: 38
7734 Sim Starting
7735 Sim over Total pop = 0 Tick Complete = 1925
7736 Fitness = 2442.319999999967
7737 Ai: 32 Gen: 38
7738 Sim Starting
7739 Sim over Total pop = 0 Tick Complete = 1300
7740 Fitness = 3363.600000000097
7741 Ai: 33 Gen: 38
7742 Sim Starting
7743 Sim over Total pop = 0 Tick Complete = 102
7744 Fitness = 185.1499999999904
7745 Ai: 34 Gen: 38
7746 Sim Starting
7747 Sim over Total pop = 0 Tick Complete = 923
7748 Fitness = 1175.8299999999524
```

```
7749 Ai: 35 Gen: 38
7750 Sim Starting
7751 Sim over Total pop = 0 Tick Complete = 507
7752 Fitness = 2175.7000000000107
7753 Ai: 36 Gen: 38
7754 Sim Starting
7755 Sim over Total pop = 5 Tick Complete = 2001
7756 Fitness = 3481.809999999994
7757 Ai: 37 Gen: 38
7758 Sim Starting
7759 Sim over Total pop = 6 Tick Complete = 2001
7760 Fitness = 3990.7300000001696
7761 Ai: 38 Gen: 38
7762 Sim Starting
7763 Sim over Total pop = 0 Tick Complete = 999
7764 Fitness = 1138.4299999999819
7765 Ai: 39 Gen: 38
7766 Sim Starting
7767 Sim over Total pop = 0 Tick Complete = 337
7768 Fitness = 1242.999999999518
7769 Ai: 40 Gen: 38
7770 Sim Starting
7771 Sim over Total pop = 0 Tick Complete = 996
7772 Fitness = 1987.5900000000534
7773 Ai: 41 Gen: 38
7774 Sim Starting
7775 Sim over Total pop = 2 Tick Complete = 2001
7776 Fitness = 3530.2399999998916
7777 Ai: 42 Gen: 38
7778 Sim Starting
7779 Sim over Total pop = 0 Tick Complete = 50
7780 Fitness = 30.2699999999417
7781 Ai: 43 Gen: 38
7782 Sim Starting
7783 Sim over Total pop = 0 Tick Complete = 1554
7784 Fitness = 2032.9599999999452
7785 Ai: 44 Gen: 38
7786 Sim Starting
7787 Sim over Total pop = 0 Tick Complete = 505
7788 Fitness = 624.4699999999895
7789 Ai: 45 Gen: 38
7790 Sim Starting
7791 Sim over Total pop = 0 Tick Complete = 1575
7792 Fitness = 2230.080000000028
```

```
7793 Ai: 46 Gen: 38
7794 Sim Starting
7795 Sim over Total pop = 0 Tick Complete = 61
7796 Fitness = 521.8299999999873
7797 Ai: 47 Gen: 38
7798 Sim Starting
7799 Sim over Total pop = 0 Tick Complete = 1102
7800 Fitness = 2745.7100000000022
7801 Ai: 48 Gen: 38
7802 Sim Starting
7803 Sim over Total pop = 5 Tick Complete = 2001
7804 Fitness = 3201.700000000003
7805 Ai: 49 Gen: 38
7806 Sim Starting
7807 Sim over Total pop = 0 Tick Complete = 1369
7808 Fitness = 2056.229999999912
7809 Ai: 50 Gen: 38
7810 Sim Starting
7811 Sim over Total pop = 0 Tick Complete = 51
7812 Fitness = 59.98999999999221
7813 Mean Fitness of Gen 38 is 1458.0968627450948 and
    best fitness 3990.7300000001696
7814 Ai: 0 Gen: 39
7815 Sim Starting
7816 Sim over Total pop = 0 Tick Complete = 649
7817 Fitness = 2191.4699999999957
7818 Ai: 1 Gen: 39
7819 Sim Starting
7820 Sim over Total pop = 0 Tick Complete = 247
7821 Fitness = 982.0099999999921
7822 Ai: 2 Gen: 39
7823 Sim Starting
7824 Sim over Total pop = 0 Tick Complete = 70
7825 Fitness = 696.1699999999971
7826 Ai: 3 Gen: 39
7827 Sim Starting
7828 Sim over Total pop = 0 Tick Complete = 507
7829 Fitness = 1472.419999999991
7830 Ai: 4 Gen: 39
7831 Sim Starting
7832 Sim over Total pop = 0 Tick Complete = 64
7833 Fitness = 566.4799999999902
7834 Ai: 5 Gen: 39
7835 Sim Starting
```

```
7836 Sim over Total pop = 0 Tick Complete = 81
7837 Fitness = 612.6999999999936
7838 Ai: 6 Gen: 39
7839 Sim Starting
7840 Sim over Total pop = 0 Tick Complete = 144
7841 Fitness = 676.3499999999823
7842 Ai: 7 Gen: 39
7843 Sim Starting
7844 Sim over Total pop = 0 Tick Complete = 103
7845 Fitness = 507.9099999999887
7846 Ai: 8 Gen: 39
7847 Sim Starting
7848 Sim over Total pop = 0 Tick Complete = 1765
7849 Fitness = 3154.2300000001433
7850 Ai: 9 Gen: 39
7851 Sim Starting
7852 Sim over Total pop = 0 Tick Complete = 70
7853 Fitness = 825.0
7854 Ai: 10 Gen: 39
7855 Sim Starting
7856 Sim over Total pop = 0 Tick Complete = 66
7857 Fitness = 661.7899999999958
7858 Ai: 11 Gen: 39
7859 Sim Starting
7860 Sim over Total pop = 0 Tick Complete = 156
7861 Fitness = 583.0999999999825
7862 Ai: 12 Gen: 39
7863 Sim Starting
7864 Sim over Total pop = 0 Tick Complete = 213
7865 Fitness = 1067.4399999999735
7866 Ai: 13 Gen: 39
7867 Sim Starting
7868 Sim over Total pop = 0 Tick Complete = 243
7869 Fitness = 1063.1000000000097
7870 Ai: 14 Gen: 39
7871 Sim Starting
7872 Sim over Total pop = 0 Tick Complete = 1685
7873 Fitness = 2723.8199999999124
7874 Ai: 15 Gen: 39
7875 Sim Starting
7876 Sim over Total pop = 0 Tick Complete = 136
7877 Fitness = 337.3999999999717
7878 Ai: 16 Gen: 39
7879 Sim Starting
```

```
7880 Sim over Total pop = 0 Tick Complete = 260
7881 Fitness = 1357.7599999999766
7882 Ai: 17 Gen: 39
7883 Sim Starting
7884 Sim over Total pop = 0 Tick Complete = 473
7885 Fitness = 1282.9199999999814
7886 Ai: 18 Gen: 39
7887 Sim Starting
7888 Sim over Total pop = 0 Tick Complete = 148
7889 Fitness = 912.1499999999941
7890 Ai: 19 Gen: 39
7891 Sim Starting
7892 Sim over Total pop = 0 Tick Complete = 173
7893 Fitness = 1083.780000000004
7894 Ai: 20 Gen: 39
7895 Sim Starting
7896 Sim over Total pop = 0 Tick Complete = 209
7897 Fitness = 1266.0799999999897
7898 Ai: 21 Gen: 39
7899 Sim Starting
7900 Sim over Total pop = 0 Tick Complete = 312
7901 Fitness = 1349.9799999999955
7902 Ai: 22 Gen: 39
7903 Sim Starting
7904 Sim over Total pop = 0 Tick Complete = 1178
7905 Fitness = 2223.8799999999774
7906 Ai: 23 Gen: 39
7907 Sim Starting
7908 Sim over Total pop = 0 Tick Complete = 214
7909 Fitness = 801.3099999999906
7910 Ai: 24 Gen: 39
7911 Sim Starting
7912 Sim over Total pop = 0 Tick Complete = 573
7913 Fitness = 1028.8399999999529
7914 Ai: 25 Gen: 39
7915 Sim Starting
7916 Sim over Total pop = 8 Tick Complete = 2001
7917 Fitness = 5249.640000000085
7918 Ai: 26 Gen: 39
7919 Sim Starting
7920 Sim over Total pop = 0 Tick Complete = 207
7921 Fitness = 1079.8999999999687
7922 Ai: 27 Gen: 39
7923 Sim Starting
```

```
7924 Sim over Total pop = 0 Tick Complete = 1275
7925 Fitness = 3833.8399999999938
7926 Ai: 28 Gen: 39
7927 Sim Starting
7928 Sim over Total pop = 0 Tick Complete = 423
7929 Fitness = 898.1799999999853
7930 Ai: 29 Gen: 39
7931 Sim Starting
7932 Sim over Total pop = 0 Tick Complete = 1355
7933 Fitness = 3596.9400000000081
7934 Ai: 30 Gen: 39
7935 Sim Starting
7936 Sim over Total pop = 0 Tick Complete = 1477
7937 Fitness = 2472.6799999999876
7938 Ai: 31 Gen: 39
7939 Sim Starting
7940 Sim over Total pop = 4 Tick Complete = 2001
7941 Fitness = 2481.03999999999
7942 Ai: 32 Gen: 39
7943 Sim Starting
7944 Sim over Total pop = 0 Tick Complete = 1627
7945 Fitness = 2925.8899999999303
7946 Ai: 33 Gen: 39
7947 Sim Starting
7948 Sim over Total pop = 0 Tick Complete = 173
7949 Fitness = 179.26999999999086
7950 Ai: 34 Gen: 39
7951 Sim Starting
7952 Sim over Total pop = 2 Tick Complete = 2001
7953 Fitness = 2800.2499999998854
7954 Ai: 35 Gen: 39
7955 Sim Starting
7956 Sim over Total pop = 0 Tick Complete = 1968
7957 Fitness = 3661.1900000005194
7958 Ai: 36 Gen: 39
7959 Sim Starting
7960 Sim over Total pop = 0 Tick Complete = 850
7961 Fitness = 1456.4199999999796
7962 Ai: 37 Gen: 39
7963 Sim Starting
7964 Sim over Total pop = 3 Tick Complete = 2001
7965 Fitness = 3416.95000000000103
7966 Ai: 38 Gen: 39
7967 Sim Starting
```

```
7968 Sim over Total pop = 0 Tick Complete = 1198
7969 Fitness = 2712.88000000000324
7970 Ai: 39 Gen: 39
7971 Sim Starting
7972 Sim over Total pop = 0 Tick Complete = 1690
7973 Fitness = 3255.6399999997902
7974 Ai: 40 Gen: 39
7975 Sim Starting
7976 Sim over Total pop = 0 Tick Complete = 310
7977 Fitness = 1015.4599999999904
7978 Ai: 41 Gen: 39
7979 Sim Starting
7980 Sim over Total pop = 0 Tick Complete = 567
7981 Fitness = 1097.9499999999834
7982 Ai: 42 Gen: 39
7983 Sim Starting
7984 Sim over Total pop = 0 Tick Complete = 1312
7985 Fitness = 2884.150000000015
7986 Ai: 43 Gen: 39
7987 Sim Starting
7988 Sim over Total pop = 0 Tick Complete = 470
7989 Fitness = 1269.2099999999882
7990 Ai: 44 Gen: 39
7991 Sim Starting
7992 Sim over Total pop = 2 Tick Complete = 2001
7993 Fitness = 2192.079999999996
7994 Ai: 45 Gen: 39
7995 Sim Starting
7996 Sim over Total pop = 0 Tick Complete = 758
7997 Fitness = 1857.3299999999729
7998 Ai: 46 Gen: 39
7999 Sim Starting
8000 Sim over Total pop = 3 Tick Complete = 2001
8001 Fitness = 2891.6200000000863
8002 Ai: 47 Gen: 39
8003 Sim Starting
8004 Sim over Total pop = 0 Tick Complete = 558
8005 Fitness = 1499.0199999999488
8006 Ai: 48 Gen: 39
8007 Sim Starting
8008 Sim over Total pop = 0 Tick Complete = 847
8009 Fitness = 1126.0899999999465
8010 Ai: 49 Gen: 39
8011 Sim Starting
```

```
8012 Sim over Total pop = 0 Tick Complete = 611
8013 Fitness = 2141.659999999974
8014 Mean Fitness of Gen 39 is 1748.46739999997 and
best fitness 5249.640000000085
8015 Ai: 0 Gen: 40
8016 Sim Starting
8017 Sim over Total pop = 0 Tick Complete = 288
8018 Fitness = 1185.5999999999917
8019 Ai: 1 Gen: 40
8020 Sim Starting
8021 Sim over Total pop = 0 Tick Complete = 847
8022 Fitness = 2277.3999999999073
8023 Ai: 2 Gen: 40
8024 Sim Starting
8025 Sim over Total pop = 0 Tick Complete = 250
8026 Fitness = 950.3199999999757
8027 Ai: 3 Gen: 40
8028 Sim Starting
8029 Sim over Total pop = 0 Tick Complete = 218
8030 Fitness = 965.2899999999998
8031 Ai: 4 Gen: 40
8032 Sim Starting
8033 Sim over Total pop = 0 Tick Complete = 69
8034 Fitness = 153.38999999999615
8035 Ai: 5 Gen: 40
8036 Sim Starting
8037 Sim over Total pop = 0 Tick Complete = 143
8038 Fitness = 262.4499999998475
8039 Ai: 6 Gen: 40
8040 Sim Starting
8041 Sim over Total pop = 0 Tick Complete = 136
8042 Fitness = 538.819999999977
8043 Ai: 7 Gen: 40
8044 Sim Starting
8045 Sim over Total pop = 0 Tick Complete = 602
8046 Fitness = 1158.1499999999792
8047 Ai: 8 Gen: 40
8048 Sim Starting
8049 Sim over Total pop = 0 Tick Complete = 125
8050 Fitness = 813.8499999999963
8051 Ai: 9 Gen: 40
8052 Sim Starting
8053 Sim over Total pop = 0 Tick Complete = 1556
8054 Fitness = 2130.2199999999607
```

```
8055 Ai: 10 Gen: 40
8056 Sim Starting
8057 Sim over Total pop = 0 Tick Complete = 95
8058 Fitness = 463.4299999999814
8059 Ai: 11 Gen: 40
8060 Sim Starting
8061 Sim over Total pop = 0 Tick Complete = 158
8062 Fitness = 529.0399999999836
8063 Ai: 12 Gen: 40
8064 Sim Starting
8065 Sim over Total pop = 0 Tick Complete = 272
8066 Fitness = 725.6599999999647
8067 Ai: 13 Gen: 40
8068 Sim Starting
8069 Sim over Total pop = 0 Tick Complete = 70
8070 Fitness = 1033.0
8071 Ai: 14 Gen: 40
8072 Sim Starting
8073 Sim over Total pop = 0 Tick Complete = 227
8074 Fitness = 980.0999999999711
8075 Ai: 15 Gen: 40
8076 Sim Starting
8077 Sim over Total pop = 0 Tick Complete = 994
8078 Fitness = 2758.2999999999447
8079 Ai: 16 Gen: 40
8080 Sim Starting
8081 Sim over Total pop = 0 Tick Complete = 170
8082 Fitness = 548.489999999987
8083 Ai: 17 Gen: 40
8084 Sim Starting
8085 Sim over Total pop = 0 Tick Complete = 137
8086 Fitness = 915.5300000000003
8087 Ai: 18 Gen: 40
8088 Sim Starting
8089 Sim over Total pop = 0 Tick Complete = 70
8090 Fitness = 962.0
8091 Ai: 19 Gen: 40
8092 Sim Starting
8093 Sim over Total pop = 0 Tick Complete = 156
8094 Fitness = 1068.3599999999901
8095 Ai: 20 Gen: 40
8096 Sim Starting
8097 Sim over Total pop = 0 Tick Complete = 67
8098 Fitness = 604.6099999999935
```

```
8099 Ai: 21 Gen: 40
8100 Sim Starting
8101 Sim over Total pop = 0 Tick Complete = 172
8102 Fitness = 833.829999999974
8103 Ai: 22 Gen: 40
8104 Sim Starting
8105 Sim over Total pop = 0 Tick Complete = 113
8106 Fitness = 712.4999999999936
8107 Ai: 23 Gen: 40
8108 Sim Starting
8109 Sim over Total pop = 0 Tick Complete = 560
8110 Fitness = 1301.4699999999443
8111 Ai: 24 Gen: 40
8112 Sim Starting
8113 Sim over Total pop = 0 Tick Complete = 175
8114 Fitness = 1041.4299999999896
8115 Ai: 25 Gen: 40
8116 Sim Starting
8117 Sim over Total pop = 0 Tick Complete = 319
8118 Fitness = 368.8399999999871
8119 Ai: 26 Gen: 40
8120 Sim Starting
8121 Sim over Total pop = 0 Tick Complete = 1529
8122 Fitness = 2890.5100000000116
8123 Ai: 27 Gen: 40
8124 Sim Starting
8125 Sim over Total pop = 0 Tick Complete = 1548
8126 Fitness = 2270.9199999999432
8127 Ai: 28 Gen: 40
8128 Sim Starting
8129 Sim over Total pop = 0 Tick Complete = 52
8130 Fitness = 12.20999999992332
8131 Ai: 29 Gen: 40
8132 Sim Starting
8133 Sim over Total pop = 0 Tick Complete = 49
8134 Fitness = 18.149999999927
8135 Ai: 30 Gen: 40
8136 Sim Starting
8137 Sim over Total pop = 3 Tick Complete = 2001
8138 Fitness = 3541.640000000038
8139 Ai: 31 Gen: 40
8140 Sim Starting
8141 Sim over Total pop = 3 Tick Complete = 2001
8142 Fitness = 2340.2300000000114
```

```
8143 Ai: 32 Gen: 40
8144 Sim Starting
8145 Sim over Total pop = 0 Tick Complete = 66
8146 Fitness = 82.92999999999381
8147 Ai: 33 Gen: 40
8148 Sim Starting
8149 Sim over Total pop = 0 Tick Complete = 982
8150 Fitness = 1503.439999999986
8151 Ai: 34 Gen: 40
8152 Sim Starting
8153 Sim over Total pop = 5 Tick Complete = 2001
8154 Fitness = 3877.650000000002
8155 Ai: 35 Gen: 40
8156 Sim Starting
8157 Sim over Total pop = 4 Tick Complete = 2001
8158 Fitness = 3365.509999999818
8159 Ai: 36 Gen: 40
8160 Sim Starting
8161 Sim over Total pop = 0 Tick Complete = 1220
8162 Fitness = 2888.030000000088
8163 Ai: 37 Gen: 40
8164 Sim Starting
8165 Sim over Total pop = 0 Tick Complete = 1057
8166 Fitness = 1516.560000000024
8167 Ai: 38 Gen: 40
8168 Sim Starting
8169 Sim over Total pop = 2 Tick Complete = 2001
8170 Fitness = 3082.799999999785
8171 Ai: 39 Gen: 40
8172 Sim Starting
8173 Sim over Total pop = 5 Tick Complete = 2001
8174 Fitness = 3692.039999999986
8175 Ai: 40 Gen: 40
8176 Sim Starting
8177 Sim over Total pop = 0 Tick Complete = 1150
8178 Fitness = 2500.5199999999422
8179 Ai: 41 Gen: 40
8180 Sim Starting
8181 Sim over Total pop = 0 Tick Complete = 808
8182 Fitness = 1634.2699999999818
8183 Ai: 42 Gen: 40
8184 Sim Starting
8185 Sim over Total pop = 3 Tick Complete = 2001
8186 Fitness = 2789.760000000093
```

```
8187 Ai: 43 Gen: 40
8188 Sim Starting
8189 Sim over Total pop = 0 Tick Complete = 1200
8190 Fitness = 1692.509999999961
8191 Ai: 44 Gen: 40
8192 Sim Starting
8193 Sim over Total pop = 0 Tick Complete = 1214
8194 Fitness = 2838.7700000000596
8195 Ai: 45 Gen: 40
8196 Sim Starting
8197 Sim over Total pop = 0 Tick Complete = 50
8198 Fitness = 19.80999999994616
8199 Ai: 46 Gen: 40
8200 Sim Starting
8201 Sim over Total pop = 0 Tick Complete = 749
8202 Fitness = 2621.0399999999813
8203 Ai: 47 Gen: 40
8204 Sim Starting
8205 Sim over Total pop = 0 Tick Complete = 1419
8206 Fitness = 3008.719999999995
8207 Ai: 48 Gen: 40
8208 Sim Starting
8209 Sim over Total pop = 2 Tick Complete = 2001
8210 Fitness = 4193.210000001785
8211 Ai: 49 Gen: 40
8212 Sim Starting
8213 Sim over Total pop = 4 Tick Complete = 2001
8214 Fitness = 3427.440000000053
8215 Mean Fitness of Gen 40 is 1621.8150000000198 and
best fitness 4193.210000001785
8216 Ai: 0 Gen: 41
8217 Sim Starting
8218 Sim over Total pop = 2 Tick Complete = 2001
8219 Fitness = 3139.0899999998087
8220 Ai: 1 Gen: 41
8221 Sim Starting
8222 Sim over Total pop = 0 Tick Complete = 1522
8223 Fitness = 2080.8799999999865
8224 Ai: 2 Gen: 41
8225 Sim Starting
8226 Sim over Total pop = 0 Tick Complete = 1896
8227 Fitness = 3247.560000001007
8228 Ai: 3 Gen: 41
8229 Sim Starting
```

```
8230 Sim over Total pop = 0 Tick Complete = 253
8231 Fitness = 886.889999999997
8232 Ai: 4 Gen: 41
8233 Sim Starting
8234 Sim over Total pop = 0 Tick Complete = 71
8235 Fitness = 536.7299999999902
8236 Ai: 5 Gen: 41
8237 Sim Starting
8238 Sim over Total pop = 0 Tick Complete = 359
8239 Fitness = 1177.379999999926
8240 Ai: 6 Gen: 41
8241 Sim Starting
8242 Sim over Total pop = 0 Tick Complete = 133
8243 Fitness = 645.2799999999825
8244 Ai: 7 Gen: 41
8245 Sim Starting
8246 Sim over Total pop = 0 Tick Complete = 89
8247 Fitness = 299.58999999999014
8248 Ai: 8 Gen: 41
8249 Sim Starting
8250 Sim over Total pop = 0 Tick Complete = 65
8251 Fitness = 588.2599999999989
8252 Ai: 9 Gen: 41
8253 Sim Starting
8254 Sim over Total pop = 0 Tick Complete = 219
8255 Fitness = 561.7099999999754
8256 Ai: 10 Gen: 41
8257 Sim Starting
8258 Sim over Total pop = 0 Tick Complete = 57
8259 Fitness = 151.56999999999465
8260 Ai: 11 Gen: 41
8261 Sim Starting
8262 Sim over Total pop = 0 Tick Complete = 71
8263 Fitness = 158.0099999998794
8264 Ai: 12 Gen: 41
8265 Sim Starting
8266 Sim over Total pop = 0 Tick Complete = 74
8267 Fitness = 766.4599999999937
8268 Ai: 13 Gen: 41
8269 Sim Starting
8270 Sim over Total pop = 0 Tick Complete = 67
8271 Fitness = 244.0999999999969
8272 Ai: 14 Gen: 41
8273 Sim Starting
```

```
8274 Sim over Total pop = 0 Tick Complete = 95
8275 Fitness = 587.0599999999886
8276 Ai: 15 Gen: 41
8277 Sim Starting
8278 Sim over Total pop = 0 Tick Complete = 70
8279 Fitness = 962.0
8280 Ai: 16 Gen: 41
8281 Sim Starting
8282 Sim over Total pop = 0 Tick Complete = 722
8283 Fitness = 1343.289999999943
8284 Ai: 17 Gen: 41
8285 Sim Starting
8286 Sim over Total pop = 0 Tick Complete = 105
8287 Fitness = 843.549999999951
8288 Ai: 18 Gen: 41
8289 Sim Starting
8290 Sim over Total pop = 0 Tick Complete = 86
8291 Fitness = 657.889999999904
8292 Ai: 19 Gen: 41
8293 Sim Starting
8294 Sim over Total pop = 0 Tick Complete = 180
8295 Fitness = 859.849999999777
8296 Ai: 20 Gen: 41
8297 Sim Starting
8298 Sim over Total pop = 0 Tick Complete = 1391
8299 Fitness = 3272.8200000000984
8300 Ai: 21 Gen: 41
8301 Sim Starting
8302 Sim over Total pop = 0 Tick Complete = 280
8303 Fitness = 823.33999999996
8304 Ai: 22 Gen: 41
8305 Sim Starting
8306 Sim over Total pop = 0 Tick Complete = 869
8307 Fitness = 2369.839999999374
8308 Ai: 23 Gen: 41
8309 Sim Starting
8310 Sim over Total pop = 0 Tick Complete = 66
8311 Fitness = 704.379999999932
8312 Ai: 24 Gen: 41
8313 Sim Starting
8314 Sim over Total pop = 0 Tick Complete = 416
8315 Fitness = 1163.16999999996
8316 Ai: 25 Gen: 41
8317 Sim Starting
```

```
8318 Sim over Total pop = 0 Tick Complete = 432
8319 Fitness = 1091.7499999999877
8320 Ai: 26 Gen: 41
8321 Sim Starting
8322
8323 Name: 3
8324 X: 905
8325 Y: 34
8326 civpop: 2
8327 trooppop: 1
8328 rawresources: 2526.0
8329 equipment: 666.0
8330 rate: 2.0
8331 popraw: 0.5
8332 popequip: 0
8333 %TroopsSupplied: 100
8334
8335 Name: 2
8336 X: 595
8337 Y: 35
8338 civpop: 4
8339 trooppop: 3
8340 rawresources: 207.9999999998178
8341 equipment: 1061.8000000000566
8342 rate: 1.2
8343 popraw: 0
8344 popequip: 0.5
8345 %TroopsSupplied: 100
8346
8347 Name: 1
8348 X: 580
8349 Y: 426
8350 civpop: 9
8351 trooppop: 7
8352 rawresources: 185.35000000003936
8353 equipment: 0
8354 rate: 1.1
8355 popraw: 0
8356 popequip: 0.5
8357 %TroopsSupplied: 70
8358
8359 Name: 9
8360 X: 963
8361 Y: 625
```

```
8362 civpop: 3
8363 trooppop: 2
8364 rawresources: 882.0
8365 equipment: 1139.0
8366 rate: 1.0
8367 popraw: 0
8368 popequip: 0.5
8369 %TroopsSupplied: 100
8370 Sim over Total pop = 0 Tick Complete = 1783
8371 Fitness = 4189.720000000003
8372 Ai: 27 Gen: 41
8373 Sim Starting
8374 Sim over Total pop = 0 Tick Complete = 590
8375 Fitness = 1106.0399999999745
8376 Ai: 28 Gen: 41
8377 Sim Starting
8378 Sim over Total pop = 0 Tick Complete = 70
8379 Fitness = 1094.0
8380 Ai: 29 Gen: 41
8381 Sim Starting
8382 Sim over Total pop = 0 Tick Complete = 1224
8383 Fitness = 1395.5600000000122
8384 Ai: 30 Gen: 41
8385 Sim Starting
8386 Sim over Total pop = 0 Tick Complete = 1049
8387 Fitness = 2230.03999999987
8388 Ai: 31 Gen: 41
8389 Sim Starting
8390 Sim over Total pop = 0 Tick Complete = 54
8391 Fitness = 63.27999999990906
8392 Ai: 32 Gen: 41
8393 Sim Starting
8394 Sim over Total pop = 0 Tick Complete = 1215
8395 Fitness = 1766.2100000000364
8396 Ai: 33 Gen: 41
8397 Sim Starting
8398 Sim over Total pop = 0 Tick Complete = 1582
8399 Fitness = 3442.0300000000343
8400 Ai: 34 Gen: 41
8401 Sim Starting
8402 Sim over Total pop = 0 Tick Complete = 52
8403 Fitness = 17.6599999999054
8404 Ai: 35 Gen: 41
8405 Sim Starting
```

```
8406 Sim over Total pop = 0 Tick Complete = 63
8407 Fitness = 615.019999999994
8408 Ai: 36 Gen: 41
8409 Sim Starting
8410 Sim over Total pop = 0 Tick Complete = 140
8411 Fitness = 209.4699999999895
8412 Ai: 37 Gen: 41
8413 Sim Starting
8414 Sim over Total pop = 2 Tick Complete = 2001
8415 Fitness = 3088.0699999998574
8416 Ai: 38 Gen: 41
8417 Sim Starting
8418 Sim over Total pop = 0 Tick Complete = 52
8419 Fitness = 43.3199999999317
8420 Ai: 39 Gen: 41
8421 Sim Starting
8422 Sim over Total pop = 0 Tick Complete = 398
8423 Fitness = 1273.5299999999784
8424 Ai: 40 Gen: 41
8425 Sim Starting
8426 Sim over Total pop = 0 Tick Complete = 54
8427 Fitness = 29.22999999992383
8428 Ai: 41 Gen: 41
8429 Sim Starting
8430 Sim over Total pop = 6 Tick Complete = 2001
8431 Fitness = 4518.05000000031
8432 Ai: 42 Gen: 41
8433 Sim Starting
8434 Sim over Total pop = 0 Tick Complete = 70
8435 Fitness = 962.0
8436 Ai: 43 Gen: 41
8437 Sim Starting
8438 Sim over Total pop = 5 Tick Complete = 2001
8439 Fitness = 4092.6199999999876
8440 Ai: 44 Gen: 41
8441 Sim Starting
8442 Sim over Total pop = 0 Tick Complete = 1596
8443 Fitness = 2872.3699999999762
8444 Ai: 45 Gen: 41
8445 Sim Starting
8446 Sim over Total pop = 0 Tick Complete = 61
8447 Fitness = 144.27999999999668
8448 Ai: 46 Gen: 41
8449 Sim Starting
```

```
8450 Sim over Total pop = 4 Tick Complete = 2001
8451 Fitness = 4299.47999999982
8452 Ai: 47 Gen: 41
8453 Sim Starting
8454 Sim over Total pop = 0 Tick Complete = 464
8455 Fitness = 808.7399999999667
8456 Ai: 48 Gen: 41
8457 Sim Starting
8458 Sim over Total pop = 2 Tick Complete = 2001
8459 Fitness = 3493.2099999998145
8460 Ai: 49 Gen: 41
8461 Sim Starting
8462 Sim over Total pop = 0 Tick Complete = 567
8463 Fitness = 1690.8999999999098
8464 Mean Fitness of Gen 41 is 1452.1456000000003 and
best fitness 4518.05000000031
8465 Ai: 0 Gen: 42
8466 Sim Starting
8467 Sim over Total pop = 0 Tick Complete = 154
8468 Fitness = 660.0399999999695
8469 Ai: 1 Gen: 42
8470 Sim Starting
8471 Sim over Total pop = 0 Tick Complete = 491
8472 Fitness = 1881.4299999999962
8473 Ai: 2 Gen: 42
8474 Sim Starting
8475 Sim over Total pop = 0 Tick Complete = 56
8476 Fitness = 71.5099999998947
8477 Ai: 3 Gen: 42
8478 Sim Starting
8479 Sim over Total pop = 0 Tick Complete = 257
8480 Fitness = 1203.879999999958
8481 Ai: 4 Gen: 42
8482 Sim Starting
8483 Sim over Total pop = 0 Tick Complete = 242
8484 Fitness = 1424.6999999999834
8485 Ai: 5 Gen: 42
8486 Sim Starting
8487 Sim over Total pop = 0 Tick Complete = 208
8488 Fitness = 997.559999999976
8489 Ai: 6 Gen: 42
8490 Sim Starting
8491 Sim over Total pop = 0 Tick Complete = 1390
8492 Fitness = 2482.0199999998895
```

```
8493 Ai: 7 Gen: 42
8494 Sim Starting
8495 Sim over Total pop = 0 Tick Complete = 152
8496 Fitness = 1025.889999999998
8497 Ai: 8 Gen: 42
8498 Sim Starting
8499 Sim over Total pop = 0 Tick Complete = 143
8500 Fitness = 823.8099999999982
8501 Ai: 9 Gen: 42
8502 Sim Starting
8503 Sim over Total pop = 0 Tick Complete = 66
8504 Fitness = 114.44999999999088
8505 Ai: 10 Gen: 42
8506 Sim Starting
8507 Sim over Total pop = 0 Tick Complete = 784
8508 Fitness = 1017.1599999999191
8509 Ai: 11 Gen: 42
8510 Sim Starting
8511 Sim over Total pop = 0 Tick Complete = 67
8512 Fitness = 602.3399999999895
8513 Ai: 12 Gen: 42
8514 Sim Starting
8515 Sim over Total pop = 0 Tick Complete = 1722
8516 Fitness = 3688.6999999998743
8517 Ai: 13 Gen: 42
8518 Sim Starting
8519 Sim over Total pop = 0 Tick Complete = 113
8520 Fitness = 924.9699999999917
8521 Ai: 14 Gen: 42
8522 Sim Starting
8523 Sim over Total pop = 0 Tick Complete = 63
8524 Fitness = 550.8699999999915
8525 Ai: 15 Gen: 42
8526 Sim Starting
8527 Sim over Total pop = 0 Tick Complete = 155
8528 Fitness = 902.0499999999865
8529 Ai: 16 Gen: 42
8530 Sim Starting
8531 Sim over Total pop = 0 Tick Complete = 1676
8532 Fitness = 2556.3999999997613
8533 Ai: 17 Gen: 42
8534 Sim Starting
8535 Sim over Total pop = 0 Tick Complete = 120
8536 Fitness = 889.0899999999916
```

```
8537 Ai: 18 Gen: 42
8538 Sim Starting
8539 Sim over Total pop = 0 Tick Complete = 86
8540 Fitness = 768.2999999999948
8541 Ai: 19 Gen: 42
8542 Sim Starting
8543 Sim over Total pop = 0 Tick Complete = 64
8544 Fitness = 531.3599999999944
8545 Ai: 20 Gen: 42
8546 Sim Starting
8547 Sim over Total pop = 0 Tick Complete = 240
8548 Fitness = 761.9799999999951
8549 Ai: 21 Gen: 42
8550 Sim Starting
8551 Sim over Total pop = 0 Tick Complete = 79
8552 Fitness = 638.7999999999937
8553 Ai: 22 Gen: 42
8554 Sim Starting
8555 Sim over Total pop = 0 Tick Complete = 857
8556 Fitness = 1596.6999999999988
8557 Ai: 23 Gen: 42
8558 Sim Starting
8559 Sim over Total pop = 0 Tick Complete = 124
8560 Fitness = 705.5499999999926
8561 Ai: 24 Gen: 42
8562 Sim Starting
8563 Sim over Total pop = 0 Tick Complete = 79
8564 Fitness = 676.039999999992
8565 Ai: 25 Gen: 42
8566 Sim Starting
8567 Sim over Total pop = 0 Tick Complete = 723
8568 Fitness = 2106.4799999999905
8569 Ai: 26 Gen: 42
8570 Sim Starting
8571 Sim over Total pop = 0 Tick Complete = 676
8572 Fitness = 2336.4000000000165
8573 Ai: 27 Gen: 42
8574 Sim Starting
8575 Sim over Total pop = 0 Tick Complete = 55
8576 Fitness = 30.559999999993984
8577 Ai: 28 Gen: 42
8578 Sim Starting
8579 Sim over Total pop = 6 Tick Complete = 2001
8580 Fitness = 4946.809999999577
```

```
8581 Ai: 29 Gen: 42
8582 Sim Starting
8583 Sim over Total pop = 4 Tick Complete = 2001
8584 Fitness = 3689.2699999999086
8585 Ai: 30 Gen: 42
8586 Sim Starting
8587 Sim over Total pop = 0 Tick Complete = 405
8588 Fitness = 517.1399999999908
8589 Ai: 31 Gen: 42
8590 Sim Starting
8591 Sim over Total pop = 0 Tick Complete = 1608
8592 Fitness = 1965.0299999999847
8593 Ai: 32 Gen: 42
8594 Sim Starting
8595 Sim over Total pop = 0 Tick Complete = 1665
8596 Fitness = 2390.2999999997237
8597 Ai: 33 Gen: 42
8598 Sim Starting
8599 Sim over Total pop = 0 Tick Complete = 1648
8600 Fitness = 4053.569999999783
8601 Ai: 34 Gen: 42
8602 Sim Starting
8603 Sim over Total pop = 5 Tick Complete = 2001
8604 Fitness = 3495.5400000000727
8605 Ai: 35 Gen: 42
8606 Sim Starting
8607 Sim over Total pop = 0 Tick Complete = 468
8608 Fitness = 1792.3599999999833
8609 Ai: 36 Gen: 42
8610 Sim Starting
8611 Sim over Total pop = 4 Tick Complete = 2001
8612 Fitness = 2803.270000000055
8613 Ai: 37 Gen: 42
8614 Sim Starting
8615 Sim over Total pop = 0 Tick Complete = 133
8616 Fitness = 186.6499999999173
8617 Ai: 38 Gen: 42
8618 Sim Starting
8619 Sim over Total pop = 0 Tick Complete = 61
8620 Fitness = 591.369999999994
8621 Ai: 39 Gen: 42
8622 Sim Starting
8623 Sim over Total pop = 0 Tick Complete = 1048
8624 Fitness = 1690.2999999999936
```

```
8625 Ai: 40 Gen: 42
8626 Sim Starting
8627 Sim over Total pop = 0 Tick Complete = 63
8628 Fitness = 622.429999999994
8629 Ai: 41 Gen: 42
8630 Sim Starting
8631 Sim over Total pop = 0 Tick Complete = 52
8632 Fitness = 94.39999999999588
8633 Ai: 42 Gen: 42
8634 Sim Starting
8635 Sim over Total pop = 0 Tick Complete = 56
8636 Fitness = 110.5499999999981
8637 Ai: 43 Gen: 42
8638 Sim Starting
8639 Sim over Total pop = 0 Tick Complete = 1418
8640 Fitness = 1612.739999999972
8641 Ai: 44 Gen: 42
8642 Sim Starting
8643 Sim over Total pop = 2 Tick Complete = 2001
8644 Fitness = 2189.96
8645 Ai: 45 Gen: 42
8646 Sim Starting
8647 Sim over Total pop = 0 Tick Complete = 754
8648 Fitness = 1379.6399999999358
8649 Ai: 46 Gen: 42
8650 Sim Starting
8651 Sim over Total pop = 0 Tick Complete = 1770
8652 Fitness = 2648.540000000065
8653 Ai: 47 Gen: 42
8654 Sim Starting
8655 Sim over Total pop = 2 Tick Complete = 2001
8656 Fitness = 3369.049999999912
8657 Ai: 48 Gen: 42
8658 Sim Starting
8659 Sim over Total pop = 2 Tick Complete = 2001
8660 Fitness = 3324.759999999833
8661 Ai: 49 Gen: 42
8662 Sim Starting
8663 Sim over Total pop = 0 Tick Complete = 180
8664 Fitness = 169.57999999999572
8665 Ai: 50 Gen: 42
8666 Sim Starting
8667 Sim over Total pop = 0 Tick Complete = 1353
8668 Fitness = 2188.6199999999885
```

```
8669 Mean Fitness of Gen 42 is 1525.5082352940788 and
      best fitness 4946.809999999577
8670 Ai: 0 Gen: 43
8671 Sim Starting
8672 Sim over Total pop = 0 Tick Complete = 664
8673 Fitness = 1906.1299999999405
8674 Ai: 1 Gen: 43
8675 Sim Starting
8676 Sim over Total pop = 0 Tick Complete = 70
8677 Fitness = 759.0
8678 Ai: 2 Gen: 43
8679 Sim Starting
8680 Sim over Total pop = 0 Tick Complete = 253
8681 Fitness = 1503.249999999977
8682 Ai: 3 Gen: 43
8683 Sim Starting
8684 Sim over Total pop = 0 Tick Complete = 81
8685 Fitness = 626.449999999999
8686 Ai: 4 Gen: 43
8687 Sim Starting
8688 Sim over Total pop = 0 Tick Complete = 123
8689 Fitness = 737.389999999832
8690 Ai: 5 Gen: 43
8691 Sim Starting
8692 Sim over Total pop = 0 Tick Complete = 176
8693 Fitness = 667.879999999632
8694 Ai: 6 Gen: 43
8695 Sim Starting
8696 Sim over Total pop = 8 Tick Complete = 2001
8697 Fitness = 3524.7400000004827
8698 Ai: 7 Gen: 43
8699 Sim Starting
8700 Sim over Total pop = 0 Tick Complete = 753
8701 Fitness = 2356.399999999637
8702 Ai: 8 Gen: 43
8703 Sim Starting
8704 Sim over Total pop = 0 Tick Complete = 262
8705 Fitness = 1189.479999999973
8706 Ai: 9 Gen: 43
8707 Sim Starting
8708 Sim over Total pop = 0 Tick Complete = 398
8709 Fitness = 1307.099999999985
8710 Ai: 10 Gen: 43
8711 Sim Starting
```

```
8712 Sim over Total pop = 0 Tick Complete = 128
8713 Fitness = 738.0999999999781
8714 Ai: 11 Gen: 43
8715 Sim Starting
8716 Sim over Total pop = 0 Tick Complete = 73
8717 Fitness = 787.1699999999976
8718 Ai: 12 Gen: 43
8719 Sim Starting
8720 Sim over Total pop = 0 Tick Complete = 67
8721 Fitness = 601.3599999999902
8722 Ai: 13 Gen: 43
8723 Sim Starting
8724 Sim over Total pop = 0 Tick Complete = 54
8725 Fitness = 152.0799999999931
8726 Ai: 14 Gen: 43
8727 Sim Starting
8728 Sim over Total pop = 0 Tick Complete = 290
8729 Fitness = 1301.8800000000128
8730 Ai: 15 Gen: 43
8731 Sim Starting
8732 Sim over Total pop = 0 Tick Complete = 275
8733 Fitness = 849.6399999999975
8734 Ai: 16 Gen: 43
8735 Sim Starting
8736 Sim over Total pop = 0 Tick Complete = 436
8737 Fitness = 1455.9799999999702
8738 Ai: 17 Gen: 43
8739 Sim Starting
8740 Sim over Total pop = 0 Tick Complete = 215
8741 Fitness = 1114.6299999999903
8742 Ai: 18 Gen: 43
8743 Sim Starting
8744 Sim over Total pop = 0 Tick Complete = 103
8745 Fitness = 295.5199999999487
8746 Ai: 19 Gen: 43
8747 Sim Starting
8748 Sim over Total pop = 0 Tick Complete = 85
8749 Fitness = 670.039999999994
8750 Ai: 20 Gen: 43
8751 Sim Starting
8752 Sim over Total pop = 0 Tick Complete = 1152
8753 Fitness = 2850.769999999913
8754 Ai: 21 Gen: 43
8755 Sim Starting
```

```
8756 Sim over Total pop = 0 Tick Complete = 320
8757 Fitness = 1030.429999999972
8758 Ai: 22 Gen: 43
8759 Sim Starting
8760 Sim over Total pop = 0 Tick Complete = 85
8761 Fitness = 298.8399999999853
8762 Ai: 23 Gen: 43
8763 Sim Starting
8764 Sim over Total pop = 0 Tick Complete = 162
8765 Fitness = 252.54999999999595
8766 Ai: 24 Gen: 43
8767 Sim Starting
8768 Sim over Total pop = 0 Tick Complete = 477
8769 Fitness = 951.5899999999849
8770 Ai: 25 Gen: 43
8771 Sim Starting
8772 Sim over Total pop = 0 Tick Complete = 179
8773 Fitness = 1062.0199999999809
8774 Ai: 26 Gen: 43
8775 Sim Starting
8776 Sim over Total pop = 0 Tick Complete = 110
8777 Fitness = 724.8099999999855
8778 Ai: 27 Gen: 43
8779 Sim Starting
8780 Sim over Total pop = 5 Tick Complete = 2001
8781 Fitness = 3549.9299999999926
8782 Ai: 28 Gen: 43
8783 Sim Starting
8784 Sim over Total pop = 0 Tick Complete = 1453
8785 Fitness = 3128.309999999914
8786 Ai: 29 Gen: 43
8787 Sim Starting
8788 Sim over Total pop = 0 Tick Complete = 49
8789 Fitness = 17.78999999993356
8790 Ai: 30 Gen: 43
8791 Sim Starting
8792 Sim over Total pop = 0 Tick Complete = 50
8793 Fitness = 18.8599999999479
8794 Ai: 31 Gen: 43
8795 Sim Starting
8796 Sim over Total pop = 0 Tick Complete = 70
8797 Fitness = 698.0
8798 Ai: 32 Gen: 43
8799 Sim Starting
```

```
8800 Sim over Total pop = 0 Tick Complete = 70
8801 Fitness = 764.0
8802 Ai: 33 Gen: 43
8803 Sim Starting
8804 Sim over Total pop = 0 Tick Complete = 1599
8805 Fitness = 1917.360000000006
8806 Ai: 34 Gen: 43
8807 Sim Starting
8808 Sim over Total pop = 0 Tick Complete = 485
8809 Fitness = 1238.3199999999838
8810 Ai: 35 Gen: 43
8811 Sim Starting
8812 Sim over Total pop = 0 Tick Complete = 816
8813 Fitness = 1562.290000000012
8814 Ai: 36 Gen: 43
8815 Sim Starting
8816 Sim over Total pop = 4 Tick Complete = 2001
8817 Fitness = 4396.069999999817
8818 Ai: 37 Gen: 43
8819 Sim Starting
8820 Sim over Total pop = 0 Tick Complete = 61
8821 Fitness = 575.6199999999939
8822 Ai: 38 Gen: 43
8823 Sim Starting
8824 Sim over Total pop = 0 Tick Complete = 1269
8825 Fitness = 2258.369999999991
8826 Ai: 39 Gen: 43
8827 Sim Starting
8828 Sim over Total pop = 0 Tick Complete = 56
8829 Fitness = 44.9999999999817
8830 Ai: 40 Gen: 43
8831 Sim Starting
8832 Sim over Total pop = 0 Tick Complete = 1664
8833 Fitness = 1885.1699999999742
8834 Ai: 41 Gen: 43
8835 Sim Starting
8836 Sim over Total pop = 0 Tick Complete = 1216
8837 Fitness = 3009.4000000000183
8838 Ai: 42 Gen: 43
8839 Sim Starting
8840 Sim over Total pop = 0 Tick Complete = 638
8841 Fitness = 1642.4099999999773
8842 Ai: 43 Gen: 43
8843 Sim Starting
```

```
8844 Sim over Total pop = 0 Tick Complete = 50
8845 Fitness = 60.89999999999325
8846 Ai: 44 Gen: 43
8847 Sim Starting
8848 Sim over Total pop = 0 Tick Complete = 1583
8849 Fitness = 3088.5800000000007
8850 Ai: 45 Gen: 43
8851 Sim Starting
8852 Sim over Total pop = 5 Tick Complete = 2001
8853 Fitness = 5316.230000000125
8854 Ai: 46 Gen: 43
8855 Sim Starting
8856 Sim over Total pop = 0 Tick Complete = 1118
8857 Fitness = 3265.7699999999736
8858 Ai: 47 Gen: 43
8859 Sim Starting
8860 Sim over Total pop = 0 Tick Complete = 1800
8861 Fitness = 2887.8499999997857
8862 Ai: 48 Gen: 43
8863 Sim Starting
8864 Sim over Total pop = 0 Tick Complete = 1305
8865 Fitness = 2264.8799999998955
8866 Ai: 49 Gen: 43
8867 Sim Starting
8868 Sim over Total pop = 0 Tick Complete = 52
8869 Fitness = 75.8299999999495
8870 Mean Fitness of Gen 43 is 1467.643399999902 and
    best fitness 5316.230000000125
8871 Ai: 0 Gen: 44
8872 Sim Starting
8873 Sim over Total pop = 0 Tick Complete = 243
8874 Fitness = 1067.129999999974
8875 Ai: 1 Gen: 44
8876 Sim Starting
8877 Sim over Total pop = 0 Tick Complete = 622
8878 Fitness = 1332.3300000000047
8879 Ai: 2 Gen: 44
8880 Sim Starting
8881 Sim over Total pop = 0 Tick Complete = 141
8882 Fitness = 857.1099999999959
8883 Ai: 3 Gen: 44
8884 Sim Starting
8885 Sim over Total pop = 0 Tick Complete = 578
8886 Fitness = 1690.6199999999806
```

```
8887 Ai: 4 Gen: 44
8888 Sim Starting
8889 Sim over Total pop = 0 Tick Complete = 586
8890 Fitness = 1069.230000000009
8891 Ai: 5 Gen: 44
8892 Sim Starting
8893 Sim over Total pop = 0 Tick Complete = 567
8894 Fitness = 1208.659999999999
8895 Ai: 6 Gen: 44
8896 Sim Starting
8897 Sim over Total pop = 0 Tick Complete = 393
8898 Fitness = 1289.959999999562
8899 Ai: 7 Gen: 44
8900 Sim Starting
8901 Sim over Total pop = 0 Tick Complete = 161
8902 Fitness = 325.9299999998455
8903 Ai: 8 Gen: 44
8904 Sim Starting
8905 Sim over Total pop = 0 Tick Complete = 259
8906 Fitness = 1046.889999999835
8907 Ai: 9 Gen: 44
8908 Sim Starting
8909 Sim over Total pop = 0 Tick Complete = 281
8910 Fitness = 1126.8100000000074
8911 Ai: 10 Gen: 44
8912 Sim Starting
8913 Sim over Total pop = 0 Tick Complete = 384
8914 Fitness = 1446.909999999553
8915 Ai: 11 Gen: 44
8916 Sim Starting
8917 Sim over Total pop = 0 Tick Complete = 1319
8918 Fitness = 1866.509999999084
8919 Ai: 12 Gen: 44
8920 Sim Starting
8921 Sim over Total pop = 0 Tick Complete = 411
8922 Fitness = 1069.159999999153
8923 Ai: 13 Gen: 44
8924 Sim Starting
8925 Sim over Total pop = 0 Tick Complete = 353
8926 Fitness = 977.319999999665
8927 Ai: 14 Gen: 44
8928 Sim Starting
8929 Sim over Total pop = 0 Tick Complete = 94
8930 Fitness = 847.579999999986
```

```
8931 Ai: 15 Gen: 44
8932 Sim Starting
8933 Sim over Total pop = 0 Tick Complete = 90
8934 Fitness = 912.6800000000007
8935 Ai: 16 Gen: 44
8936 Sim Starting
8937 Sim over Total pop = 0 Tick Complete = 700
8938 Fitness = 2306.199999999984
8939 Ai: 17 Gen: 44
8940 Sim Starting
8941 Sim over Total pop = 0 Tick Complete = 1289
8942 Fitness = 2498.199999999976
8943 Ai: 18 Gen: 44
8944 Sim Starting
8945 Sim over Total pop = 0 Tick Complete = 138
8946 Fitness = 211.6699999998703
8947 Ai: 19 Gen: 44
8948 Sim Starting
8949 Sim over Total pop = 0 Tick Complete = 67
8950 Fitness = 540.9099999999862
8951 Ai: 20 Gen: 44
8952 Sim Starting
8953 Sim over Total pop = 0 Tick Complete = 63
8954 Fitness = 668.039999999953
8955 Ai: 21 Gen: 44
8956 Sim Starting
8957 Sim over Total pop = 0 Tick Complete = 61
8958 Fitness = 564.9899999999928
8959 Ai: 22 Gen: 44
8960 Sim Starting
8961 Sim over Total pop = 0 Tick Complete = 63
8962 Fitness = 581.279999999941
8963 Ai: 23 Gen: 44
8964 Sim Starting
8965 Sim over Total pop = 0 Tick Complete = 85
8966 Fitness = 665.589999999928
8967 Ai: 24 Gen: 44
8968 Sim Starting
8969 Sim over Total pop = 0 Tick Complete = 743
8970 Fitness = 1643.549999999949
8971 Ai: 25 Gen: 44
8972 Sim Starting
8973 Sim over Total pop = 0 Tick Complete = 135
8974 Fitness = 851.5999999999897
```

```
8975 Ai: 26 Gen: 44
8976 Sim Starting
8977 Sim over Total pop = 0 Tick Complete = 92
8978 Fitness = 721.7699999999891
8979 Ai: 27 Gen: 44
8980 Sim Starting
8981 Sim over Total pop = 3 Tick Complete = 2001
8982 Fitness = 3561.7700000000198
8983 Ai: 28 Gen: 44
8984 Sim Starting
8985 Sim over Total pop = 3 Tick Complete = 2001
8986 Fitness = 4334.609999999919
8987 Ai: 29 Gen: 44
8988 Sim Starting
8989 Sim over Total pop = 2 Tick Complete = 2001
8990 Fitness = 3342.059999999413
8991 Ai: 30 Gen: 44
8992 Sim Starting
8993 Sim over Total pop = 6 Tick Complete = 2001
8994 Fitness = 4513.7399999998215
8995 Ai: 31 Gen: 44
8996 Sim Starting
8997 Sim over Total pop = 0 Tick Complete = 533
8998 Fitness = 1470.1800000000019
8999 Ai: 32 Gen: 44
9000 Sim Starting
9001 Sim over Total pop = 0 Tick Complete = 305
9002 Fitness = 895.449999999994
9003 Ai: 33 Gen: 44
9004 Sim Starting
9005 Sim over Total pop = 2 Tick Complete = 2001
9006 Fitness = 3639.2600000012985
9007 Ai: 34 Gen: 44
9008 Sim Starting
9009 Sim over Total pop = 0 Tick Complete = 1610
9010 Fitness = 4279.580000000084
9011 Ai: 35 Gen: 44
9012 Sim Starting
9013 Sim over Total pop = 2 Tick Complete = 2001
9014 Fitness = 2780.5599999998813
9015 Ai: 36 Gen: 44
9016 Sim Starting
9017 Sim over Total pop = 2 Tick Complete = 2001
9018 Fitness = 2785.539999999887
```

```
9019 Ai: 37 Gen: 44
9020 Sim Starting
9021 Sim over Total pop = 0 Tick Complete = 971
9022 Fitness = 2185.7499999999927
9023 Ai: 38 Gen: 44
9024 Sim Starting
9025 Sim over Total pop = 0 Tick Complete = 385
9026 Fitness = 795.6499999999949
9027 Ai: 39 Gen: 44
9028 Sim Starting
9029 Sim over Total pop = 0 Tick Complete = 509
9030 Fitness = 1457.249999999969
9031 Ai: 40 Gen: 44
9032 Sim Starting
9033 Sim over Total pop = 0 Tick Complete = 446
9034 Fitness = 1125.5099999999359
9035 Ai: 41 Gen: 44
9036 Sim Starting
9037 Sim over Total pop = 0 Tick Complete = 949
9038 Fitness = 2931.079999999853
9039 Ai: 42 Gen: 44
9040 Sim Starting
9041 Sim over Total pop = 0 Tick Complete = 103
9042 Fitness = 185.9799999999448
9043 Ai: 43 Gen: 44
9044 Sim Starting
9045 Sim over Total pop = 5 Tick Complete = 2001
9046 Fitness = 3829.549999999993
9047 Ai: 44 Gen: 44
9048 Sim Starting
9049 Sim over Total pop = 0 Tick Complete = 844
9050 Fitness = 2900.899999999583
9051 Ai: 45 Gen: 44
9052 Sim Starting
9053 Sim over Total pop = 0 Tick Complete = 70
9054 Fitness = 896.0
9055 Ai: 46 Gen: 44
9056 Sim Starting
9057 Sim over Total pop = 0 Tick Complete = 593
9058 Fitness = 1812.7400000000089
9059 Ai: 47 Gen: 44
9060 Sim Starting
9061 Sim over Total pop = 6 Tick Complete = 2001
9062 Fitness = 4203.280000000244
```

```
9063 Ai: 48 Gen: 44
9064 Sim Starting
9065 Sim over Total pop = 6 Tick Complete = 2001
9066 Fitness = 2708.109999999993
9067 Ai: 49 Gen: 44
9068 Sim Starting
9069 Sim over Total pop = 3 Tick Complete = 2001
9070 Fitness = 3971.6400000002436
9071 Ai: 50 Gen: 44
9072 Sim Starting
9073 Sim over Total pop = 0 Tick Complete = 62
9074 Fitness = 599.2199999999925
9075 Mean Fitness of Gen 44 is 1776.3537254902085 and
best fitness 4513.7399999998215
9076 Ai: 0 Gen: 45
9077 Sim Starting
9078 Sim over Total pop = 0 Tick Complete = 1068
9079 Fitness = 1413.9099999999635
9080 Ai: 1 Gen: 45
9081 Sim Starting
9082 Sim over Total pop = 0 Tick Complete = 629
9083 Fitness = 1866.8499999999517
9084 Ai: 2 Gen: 45
9085 Sim Starting
9086 Sim over Total pop = 0 Tick Complete = 572
9087 Fitness = 1219.7899999999918
9088 Ai: 3 Gen: 45
9089 Sim Starting
9090 Sim over Total pop = 0 Tick Complete = 385
9091 Fitness = 1168.6899999999819
9092 Ai: 4 Gen: 45
9093 Sim Starting
9094 Sim over Total pop = 0 Tick Complete = 556
9095 Fitness = 1112.5499999999615
9096 Ai: 5 Gen: 45
9097 Sim Starting
9098 Sim over Total pop = 0 Tick Complete = 157
9099 Fitness = 246.69999999999658
9100 Ai: 6 Gen: 45
9101 Sim Starting
9102 Sim over Total pop = 0 Tick Complete = 432
9103 Fitness = 1456.7399999999923
9104 Ai: 7 Gen: 45
9105 Sim Starting
```

```
9106 Sim over Total pop = 0 Tick Complete = 328
9107 Fitness = 782.3199999999861
9108 Ai: 8 Gen: 45
9109 Sim Starting
9110 Sim over Total pop = 0 Tick Complete = 902
9111 Fitness = 2515.2899999999822
9112 Ai: 9 Gen: 45
9113 Sim Starting
9114 Sim over Total pop = 0 Tick Complete = 201
9115 Fitness = 921.109999999979
9116 Ai: 10 Gen: 45
9117 Sim Starting
9118 Sim over Total pop = 0 Tick Complete = 263
9119 Fitness = 1089.8399999999842
9120 Ai: 11 Gen: 45
9121 Sim Starting
9122 Sim over Total pop = 0 Tick Complete = 195
9123 Fitness = 1030.0000000000007
9124 Ai: 12 Gen: 45
9125 Sim Starting
9126 Sim over Total pop = 0 Tick Complete = 1195
9127 Fitness = 1899.8999999999749
9128 Ai: 13 Gen: 45
9129 Sim Starting
9130 Sim over Total pop = 0 Tick Complete = 108
9131 Fitness = 601.8299999999808
9132 Ai: 14 Gen: 45
9133 Sim Starting
9134 Sim over Total pop = 0 Tick Complete = 600
9135 Fitness = 1311.1099999999872
9136 Ai: 15 Gen: 45
9137 Sim Starting
9138 Sim over Total pop = 0 Tick Complete = 629
9139 Fitness = 1808.3399999999592
9140 Ai: 16 Gen: 45
9141 Sim Starting
9142 Sim over Total pop = 0 Tick Complete = 153
9143 Fitness = 747.2499999999969
9144 Ai: 17 Gen: 45
9145 Sim Starting
9146 Sim over Total pop = 0 Tick Complete = 1046
9147 Fitness = 2094.0200000000295
9148 Ai: 18 Gen: 45
9149 Sim Starting
```

```
9150 Sim over Total pop = 0 Tick Complete = 101
9151 Fitness = 753.0199999999927
9152 Ai: 19 Gen: 45
9153 Sim Starting
9154 Sim over Total pop = 0 Tick Complete = 89
9155 Fitness = 587.7999999999919
9156 Ai: 20 Gen: 45
9157 Sim Starting
9158 Sim over Total pop = 0 Tick Complete = 76
9159 Fitness = 631.919999999994
9160 Ai: 21 Gen: 45
9161 Sim Starting
9162 Sim over Total pop = 0 Tick Complete = 103
9163 Fitness = 707.3499999999889
9164 Ai: 22 Gen: 45
9165 Sim Starting
9166 Sim over Total pop = 0 Tick Complete = 101
9167 Fitness = 697.0799999999919
9168 Ai: 23 Gen: 45
9169 Sim Starting
9170 Sim over Total pop = 0 Tick Complete = 1340
9171 Fitness = 2624.1599999998757
9172 Ai: 24 Gen: 45
9173 Sim Starting
9174 Sim over Total pop = 5 Tick Complete = 2001
9175 Fitness = 3767.659999999988
9176 Ai: 25 Gen: 45
9177 Sim Starting
9178 Sim over Total pop = 2 Tick Complete = 2001
9179 Fitness = 3047.519999999914
9180 Ai: 26 Gen: 45
9181 Sim Starting
9182 Sim over Total pop = 0 Tick Complete = 1423
9183 Fitness = 1723.0900000000238
9184 Ai: 27 Gen: 45
9185 Sim Starting
9186 Sim over Total pop = 0 Tick Complete = 1521
9187 Fitness = 2579.9600000000733
9188 Ai: 28 Gen: 45
9189 Sim Starting
9190 Sim over Total pop = 9 Tick Complete = 2001
9191 Fitness = 4092.14000000000785
9192 Ai: 29 Gen: 45
9193 Sim Starting
```

```
9194 Sim over Total pop = 4 Tick Complete = 2001
9195 Fitness = 2418.610000000046
9196 Ai: 30 Gen: 45
9197 Sim Starting
9198 Sim over Total pop = 0 Tick Complete = 518
9199 Fitness = 1460.0199999999727
9200 Ai: 31 Gen: 45
9201 Sim Starting
9202 Sim over Total pop = 0 Tick Complete = 63
9203 Fitness = 663.4199999999929
9204 Ai: 32 Gen: 45
9205 Sim Starting
9206 Sim over Total pop = 0 Tick Complete = 412
9207 Fitness = 654.5199999999927
9208 Ai: 33 Gen: 45
9209 Sim Starting
9210 Sim over Total pop = 0 Tick Complete = 66
9211 Fitness = 621.9399999999943
9212 Ai: 34 Gen: 45
9213 Sim Starting
9214 Sim over Total pop = 6 Tick Complete = 2001
9215 Fitness = 3094.1799999999084
9216 Ai: 35 Gen: 45
9217 Sim Starting
9218 Sim over Total pop = 4 Tick Complete = 2001
9219 Fitness = 4896.199999999544
9220 Ai: 36 Gen: 45
9221 Sim Starting
9222 Sim over Total pop = 3 Tick Complete = 2001
9223 Fitness = 2887.660000000084
9224 Ai: 37 Gen: 45
9225 Sim Starting
9226 Sim over Total pop = 0 Tick Complete = 57
9227 Fitness = 58.69999999992876
9228 Ai: 38 Gen: 45
9229 Sim Starting
9230 Sim over Total pop = 5 Tick Complete = 2001
9231 Fitness = 4433.359999999988
9232 Ai: 39 Gen: 45
9233 Sim Starting
9234 Sim over Total pop = 0 Tick Complete = 1176
9235 Fitness = 1267.599999999993
9236 Ai: 40 Gen: 45
9237 Sim Starting
```

```
9238 Sim over Total pop = 0 Tick Complete = 57
9239 Fitness = 124.64999999999631
9240 Ai: 41 Gen: 45
9241 Sim Starting
9242 Sim over Total pop = 2 Tick Complete = 2001
9243 Fitness = 3292.810000000181
9244 Ai: 42 Gen: 45
9245 Sim Starting
9246 Sim over Total pop = 0 Tick Complete = 64
9247 Fitness = 598.919999999995
9248 Ai: 43 Gen: 45
9249 Sim Starting
9250 Sim over Total pop = 3 Tick Complete = 2001
9251 Fitness = 2638.2800000000543
9252 Ai: 44 Gen: 45
9253 Sim Starting
9254 Sim over Total pop = 3 Tick Complete = 2001
9255 Fitness = 2297.0100000000057
9256 Ai: 45 Gen: 45
9257 Sim Starting
9258 Sim over Total pop = 0 Tick Complete = 638
9259 Fitness = 871.6899999999878
9260 Ai: 46 Gen: 45
9261 Sim Starting
9262 Sim over Total pop = 0 Tick Complete = 831
9263 Fitness = 2648.200000000006
9264 Ai: 47 Gen: 45
9265 Sim Starting
9266 Sim over Total pop = 0 Tick Complete = 52
9267 Fitness = 150.36999999999284
9268 Ai: 48 Gen: 45
9269 Sim Starting
9270 Sim over Total pop = 0 Tick Complete = 353
9271 Fitness = 1107.929999999969
9272 Ai: 49 Gen: 45
9273 Sim Starting
9274 Sim over Total pop = 0 Tick Complete = 861
9275 Fitness = 2376.7299999999696
9276 Mean Fitness of Gen 45 is 1661.2147999999843 and
    best fitness 4896.199999999544
9277 Ai: 0 Gen: 46
9278 Sim Starting
9279 Sim over Total pop = 0 Tick Complete = 346
9280 Fitness = 780.2899999999797
```

```
9281 Ai: 1 Gen: 46
9282 Sim Starting
9283 Sim over Total pop = 0 Tick Complete = 65
9284 Fitness = 79.66999999999808
9285 Ai: 2 Gen: 46
9286 Sim Starting
9287 Sim over Total pop = 0 Tick Complete = 165
9288 Fitness = 345.4899999999881
9289 Ai: 3 Gen: 46
9290 Sim Starting
9291 Sim over Total pop = 0 Tick Complete = 70
9292 Fitness = 835.0
9293 Ai: 4 Gen: 46
9294 Sim Starting
9295 Sim over Total pop = 2 Tick Complete = 2001
9296 Fitness = 3458.8799999998414
9297 Ai: 5 Gen: 46
9298 Sim Starting
9299 Sim over Total pop = 0 Tick Complete = 116
9300 Fitness = 121.2399999999846
9301 Ai: 6 Gen: 46
9302 Sim Starting
9303 Sim over Total pop = 0 Tick Complete = 294
9304 Fitness = 629.2199999999891
9305 Ai: 7 Gen: 46
9306 Sim Starting
9307 Sim over Total pop = 0 Tick Complete = 125
9308 Fitness = 745.8400000000041
9309 Ai: 8 Gen: 46
9310 Sim Starting
9311 Sim over Total pop = 0 Tick Complete = 307
9312 Fitness = 1692.1199999999778
9313 Ai: 9 Gen: 46
9314 Sim Starting
9315 Sim over Total pop = 0 Tick Complete = 200
9316 Fitness = 931.6499999999897
9317 Ai: 10 Gen: 46
9318 Sim Starting
9319 Sim over Total pop = 0 Tick Complete = 206
9320 Fitness = 464.0399999999894
9321 Ai: 11 Gen: 46
9322 Sim Starting
9323 Sim over Total pop = 0 Tick Complete = 70
9324 Fitness = 729.3299999999966
```

```
9325 Ai: 12 Gen: 46
9326 Sim Starting
9327 Sim over Total pop = 0 Tick Complete = 144
9328 Fitness = 266.5799999999947
9329 Ai: 13 Gen: 46
9330 Sim Starting
9331 Sim over Total pop = 0 Tick Complete = 717
9332 Fitness = 2763.66000000000194
9333 Ai: 14 Gen: 46
9334 Sim Starting
9335 Sim over Total pop = 0 Tick Complete = 77
9336 Fitness = 596.0999999999881
9337 Ai: 15 Gen: 46
9338 Sim Starting
9339 Sim over Total pop = 0 Tick Complete = 665
9340 Fitness = 1523.0799999999942
9341 Ai: 16 Gen: 46
9342 Sim Starting
9343 Sim over Total pop = 0 Tick Complete = 61
9344 Fitness = 571.4199999999918
9345 Ai: 17 Gen: 46
9346 Sim Starting
9347 Sim over Total pop = 0 Tick Complete = 66
9348 Fitness = 585.0299999999894
9349 Ai: 18 Gen: 46
9350 Sim Starting
9351 Sim over Total pop = 0 Tick Complete = 63
9352 Fitness = 569.1799999999902
9353 Ai: 19 Gen: 46
9354 Sim Starting
9355 Sim over Total pop = 0 Tick Complete = 438
9356 Fitness = 1090.8299999999601
9357 Ai: 20 Gen: 46
9358 Sim Starting
9359 Sim over Total pop = 0 Tick Complete = 564
9360 Fitness = 1171.229999999994
9361 Ai: 21 Gen: 46
9362 Sim Starting
9363 Sim over Total pop = 0 Tick Complete = 99
9364 Fitness = 613.0699999999825
9365 Ai: 22 Gen: 46
9366 Sim Starting
9367 Sim over Total pop = 0 Tick Complete = 127
9368 Fitness = 845.799999999982
```

```
9369 Ai: 23 Gen: 46
9370 Sim Starting
9371 Sim over Total pop = 8 Tick Complete = 2001
9372 Fitness = 2642.0199999999154
9373 Ai: 24 Gen: 46
9374 Sim Starting
9375 Sim over Total pop = 0 Tick Complete = 1337
9376 Fitness = 1966.9199999999391
9377 Ai: 25 Gen: 46
9378 Sim Starting
9379 Sim over Total pop = 0 Tick Complete = 504
9380 Fitness = 1882.2899999999547
9381 Ai: 26 Gen: 46
9382 Sim Starting
9383 Sim over Total pop = 0 Tick Complete = 1566
9384 Fitness = 3625.3100000000016
9385 Ai: 27 Gen: 46
9386 Sim Starting
9387 Sim over Total pop = 5 Tick Complete = 2001
9388 Fitness = 4512.229999999746
9389 Ai: 28 Gen: 46
9390 Sim Starting
9391 Sim over Total pop = 0 Tick Complete = 54
9392 Fitness = 43.85999999999109
9393 Ai: 29 Gen: 46
9394 Sim Starting
9395 Sim over Total pop = 0 Tick Complete = 1147
9396 Fitness = 2602.7499999999754
9397 Ai: 30 Gen: 46
9398 Sim Starting
9399 Sim over Total pop = 0 Tick Complete = 1500
9400 Fitness = 3040.619999999978
9401 Ai: 31 Gen: 46
9402 Sim Starting
9403 Sim over Total pop = 0 Tick Complete = 624
9404 Fitness = 1124.2799999999033
9405 Ai: 32 Gen: 46
9406 Sim Starting
9407 Sim over Total pop = 0 Tick Complete = 553
9408 Fitness = 1048.0599999999865
9409 Ai: 33 Gen: 46
9410 Sim Starting
9411 Sim over Total pop = 4 Tick Complete = 2001
9412 Fitness = 2899.3100000000056
```

```
9413 Ai: 34 Gen: 46
9414 Sim Starting
9415 Sim over Total pop = 5 Tick Complete = 2001
9416 Fitness = 3813.3999999999824
9417 Ai: 35 Gen: 46
9418 Sim Starting
9419 Sim over Total pop = 0 Tick Complete = 574
9420 Fitness = 1283.119999999987
9421 Ai: 36 Gen: 46
9422 Sim Starting
9423 Sim over Total pop = 0 Tick Complete = 825
9424 Fitness = 1864.829999999944
9425 Ai: 37 Gen: 46
9426 Sim Starting
9427 Sim over Total pop = 0 Tick Complete = 50
9428 Fitness = 22.3099999999156
9429 Ai: 38 Gen: 46
9430 Sim Starting
9431 Sim over Total pop = 2 Tick Complete = 2001
9432 Fitness = 3150.0999999998485
9433 Ai: 39 Gen: 46
9434 Sim Starting
9435 Sim over Total pop = 0 Tick Complete = 1458
9436 Fitness = 2994.4299999999794
9437 Ai: 40 Gen: 46
9438 Sim Starting
9439
9440 Name: 8
9441 X: 475
9442 Y: 394
9443 civpop: 60
9444 trooppop: 48
9445 rawresources: 0
9446 equipment: 0
9447 rate: 1.2
9448 popraw: 0
9449 popequip: 0.5
9450 %TroopsSupplied: 0
9451 Sim over Total pop = 0 Tick Complete = 70
9452 Fitness = 703.0
9453 Ai: 41 Gen: 46
9454 Sim Starting
9455 Sim over Total pop = 0 Tick Complete = 51
9456 Fitness = 48.7699999999235
```

```
9457 Ai: 42 Gen: 46
9458 Sim Starting
9459
9460 Name: 0
9461 X: 676
9462 Y: 59
9463 civpop: 8
9464 trooppop: 6
9465 rawresources: 3091.14999999866
9466 equipment: 0
9467 rate: 1.2
9468 popraw: 0
9469 popequip: 0.5
9470 %TroopsSupplied: 80
9471
9472 Name: 0
9473 X: 676
9474 Y: 59
9475 civpop: 8
9476 trooppop: 6
9477 rawresources: 2788.749999998545
9478 equipment: 0
9479 rate: 1.2
9480 popraw: 0
9481 popequip: 0.5
9482 %TroopsSupplied: 80
9483
9484 Name: 0
9485 X: 676
9486 Y: 59
9487 civpop: 8
9488 trooppop: 6
9489 rawresources: 2663.949999998498
9490 equipment: 0
9491 rate: 1.2
9492 popraw: 0
9493 popequip: 0.5
9494 %TroopsSupplied: 80
9495
9496 Name: 0
9497 X: 676
9498 Y: 59
9499 civpop: 8
9500 trooppop: 6
```

```
9501 rawresources: 2563.149999999846
9502 equipment: 0
9503 rate: 1.2
9504 popraw: 0
9505 popequip: 0.5
9506 %TroopsSupplied: 80
9507
9508 Name: 0
9509 X: 676
9510 Y: 59
9511 civpop: 8
9512 trooppop: 6
9513 rawresources: 2467.1499999998423
9514 equipment: 0
9515 rate: 1.2
9516 popraw: 0
9517 popequip: 0.5
9518 %TroopsSupplied: 80
9519 Sim over Total pop = 0 Tick Complete = 1904
9520 Fitness = 2530.029999999983
9521 Ai: 43 Gen: 46
9522 Sim Starting
9523 Sim over Total pop = 0 Tick Complete = 1637
9524 Fitness = 2121.180000000042
9525 Ai: 44 Gen: 46
9526 Sim Starting
9527 Sim over Total pop = 4 Tick Complete = 2001
9528 Fitness = 2959.6599999999876
9529 Ai: 45 Gen: 46
9530 Sim Starting
9531 Sim over Total pop = 0 Tick Complete = 230
9532 Fitness = 1064.8499999999872
9533 Ai: 46 Gen: 46
9534 Sim Starting
9535 Sim over Total pop = 0 Tick Complete = 1773
9536 Fitness = 3265.059999999986
9537 Ai: 47 Gen: 46
9538 Sim Starting
9539 Sim over Total pop = 4 Tick Complete = 2001
9540 Fitness = 3977.6099999997723
9541 Ai: 48 Gen: 46
9542 Sim Starting
9543 Sim over Total pop = 0 Tick Complete = 1295
9544 Fitness = 3185.2599999999884
```

```
9545 Ai: 49 Gen: 46
9546 Sim Starting
9547 Sim over Total pop = 2 Tick Complete = 2001
9548 Fitness = 2747.9199999998955
9549 Ai: 50 Gen: 46
9550 Sim Starting
9551 Sim over Total pop = 2 Tick Complete = 2001
9552 Fitness = 2804.279999999873
9553 Mean Fitness of Gen 46 is 1673.1805882352617 and
best fitness 4512.229999999746
9554 Ai: 0 Gen: 47
9555 Sim Starting
9556 Sim over Total pop = 0 Tick Complete = 69
9557 Fitness = 688.5999999999975
9558 Ai: 1 Gen: 47
9559 Sim Starting
9560 Sim over Total pop = 0 Tick Complete = 116
9561 Fitness = 774.7399999999867
9562 Ai: 2 Gen: 47
9563 Sim Starting
9564 Sim over Total pop = 0 Tick Complete = 1208
9565 Fitness = 2145.499999999969
9566 Ai: 3 Gen: 47
9567 Sim Starting
9568 Sim over Total pop = 0 Tick Complete = 459
9569 Fitness = 1921.960000000009
9570 Ai: 4 Gen: 47
9571 Sim Starting
9572 Sim over Total pop = 0 Tick Complete = 563
9573 Fitness = 2015.449999999954
9574 Ai: 5 Gen: 47
9575 Sim Starting
9576 Sim over Total pop = 0 Tick Complete = 1482
9577 Fitness = 2149.2699999998554
9578 Ai: 6 Gen: 47
9579 Sim Starting
9580 Sim over Total pop = 12 Tick Complete = 2001
9581 Fitness = 3793.699999999852
9582 Ai: 7 Gen: 47
9583 Sim Starting
9584 Sim over Total pop = 0 Tick Complete = 94
9585 Fitness = 154.12999999999528
9586 Ai: 8 Gen: 47
9587 Sim Starting
```

```
9588 Sim over Total pop = 0 Tick Complete = 1198
9589 Fitness = 2047.959999999991
9590 Ai: 9 Gen: 47
9591 Sim Starting
9592 Sim over Total pop = 0 Tick Complete = 241
9593 Fitness = 1163.4199999999908
9594 Ai: 10 Gen: 47
9595 Sim Starting
9596 Sim over Total pop = 2 Tick Complete = 2001
9597 Fitness = 2842.2399999998206
9598 Ai: 11 Gen: 47
9599 Sim Starting
9600 Sim over Total pop = 0 Tick Complete = 740
9601 Fitness = 1999.7099999999168
9602 Ai: 12 Gen: 47
9603 Sim Starting
9604 Sim over Total pop = 0 Tick Complete = 63
9605 Fitness = 679.3199999999944
9606 Ai: 13 Gen: 47
9607 Sim Starting
9608 Sim over Total pop = 0 Tick Complete = 270
9609 Fitness = 914.1499999999941
9610 Ai: 14 Gen: 47
9611 Sim Starting
9612 Sim over Total pop = 0 Tick Complete = 995
9613 Fitness = 2390.7799999999734
9614 Ai: 15 Gen: 47
9615 Sim Starting
9616 Sim over Total pop = 0 Tick Complete = 266
9617 Fitness = 1340.0699999999938
9618 Ai: 16 Gen: 47
9619 Sim Starting
9620 Sim over Total pop = 0 Tick Complete = 62
9621 Fitness = 66.1099999999945
9622 Ai: 17 Gen: 47
9623 Sim Starting
9624 Sim over Total pop = 0 Tick Complete = 328
9625 Fitness = 971.4799999999827
9626 Ai: 18 Gen: 47
9627 Sim Starting
9628 Sim over Total pop = 0 Tick Complete = 106
9629 Fitness = 506.59999999999405
9630 Ai: 19 Gen: 47
9631 Sim Starting
```

```
9632 Sim over Total pop = 0 Tick Complete = 130
9633 Fitness = 647.95999999999919
9634 Ai: 20 Gen: 47
9635 Sim Starting
9636 Sim over Total pop = 0 Tick Complete = 185
9637 Fitness = 353.3099999999802
9638 Ai: 21 Gen: 47
9639 Sim Starting
9640 Sim over Total pop = 2 Tick Complete = 2001
9641 Fitness = 2560.3799999997345
9642 Ai: 22 Gen: 47
9643 Sim Starting
9644 Sim over Total pop = 0 Tick Complete = 516
9645 Fitness = 1160.4899999999345
9646 Ai: 23 Gen: 47
9647 Sim Starting
9648 Sim over Total pop = 0 Tick Complete = 74
9649 Fitness = 144.7799999999944
9650 Ai: 24 Gen: 47
9651 Sim Starting
9652 Sim over Total pop = 0 Tick Complete = 73
9653 Fitness = 909.8299999999998
9654 Ai: 25 Gen: 47
9655 Sim Starting
9656 Sim over Total pop = 0 Tick Complete = 899
9657 Fitness = 995.9600000000053
9658 Ai: 26 Gen: 47
9659 Sim Starting
9660 Sim over Total pop = 3 Tick Complete = 2001
9661 Fitness = 3001.490000000094
9662 Ai: 27 Gen: 47
9663 Sim Starting
9664 Sim over Total pop = 0 Tick Complete = 58
9665 Fitness = 109.0799999999825
9666 Ai: 28 Gen: 47
9667 Sim Starting
9668 Sim over Total pop = 5 Tick Complete = 2001
9669 Fitness = 5600.490000000014
9670 Ai: 29 Gen: 47
9671 Sim Starting
9672 Sim over Total pop = 3 Tick Complete = 2001
9673 Fitness = 2482.1500000000324
9674 Ai: 30 Gen: 47
9675 Sim Starting
```

```
9676 Sim over Total pop = 0 Tick Complete = 749
9677 Fitness = 1756.5200000000104
9678 Ai: 31 Gen: 47
9679 Sim Starting
9680 Sim over Total pop = 0 Tick Complete = 1611
9681 Fitness = 2253.490000000038
9682 Ai: 32 Gen: 47
9683 Sim Starting
9684 Sim over Total pop = 0 Tick Complete = 50
9685 Fitness = 2.13999999994327
9686 Ai: 33 Gen: 47
9687 Sim Starting
9688 Sim over Total pop = 0 Tick Complete = 272
9689 Fitness = 886.820000000004
9690 Ai: 34 Gen: 47
9691 Sim Starting
9692 Sim over Total pop = 2 Tick Complete = 2001
9693 Fitness = 4187.9999999985
9694 Ai: 35 Gen: 47
9695 Sim Starting
9696 Sim over Total pop = 0 Tick Complete = 889
9697 Fitness = 2007.910000000006
9698 Ai: 36 Gen: 47
9699 Sim Starting
9700 Sim over Total pop = 0 Tick Complete = 1832
9701 Fitness = 1983.5000000000116
9702 Ai: 37 Gen: 47
9703 Sim Starting
9704 Sim over Total pop = 0 Tick Complete = 55
9705 Fitness = 64.8099999999264
9706 Ai: 38 Gen: 47
9707 Sim Starting
9708 Sim over Total pop = 7 Tick Complete = 2001
9709 Fitness = 3748.93999999851
9710 Ai: 39 Gen: 47
9711 Sim Starting
9712 Sim over Total pop = 2 Tick Complete = 2001
9713 Fitness = 2746.699999998957
9714 Ai: 40 Gen: 47
9715 Sim Starting
9716 Sim over Total pop = 0 Tick Complete = 1107
9717 Fitness = 3352.3700000001013
9718 Ai: 41 Gen: 47
9719 Sim Starting
```

```
9720 Sim over Total pop = 0 Tick Complete = 1116
9721 Fitness = 3940.2299999998527
9722 Ai: 42 Gen: 47
9723 Sim Starting
9724 Sim over Total pop = 0 Tick Complete = 62
9725 Fitness = 595.0899999999928
9726 Ai: 43 Gen: 47
9727 Sim Starting
9728 Sim over Total pop = 5 Tick Complete = 2001
9729 Fitness = 3795.079999999867
9730 Ai: 44 Gen: 47
9731 Sim Starting
9732 Sim over Total pop = 0 Tick Complete = 865
9733 Fitness = 1599.089999999991
9734 Ai: 45 Gen: 47
9735 Sim Starting
9736 Sim over Total pop = 2 Tick Complete = 2001
9737 Fitness = 4226.469999999812
9738 Ai: 46 Gen: 47
9739 Sim Starting
9740 Sim over Total pop = 0 Tick Complete = 1077
9741 Fitness = 2789.4400000000414
9742 Ai: 47 Gen: 47
9743 Sim Starting
9744 Sim over Total pop = 4 Tick Complete = 2001
9745 Fitness = 5038.179999999726
9746 Ai: 48 Gen: 47
9747 Sim Starting
9748 Sim over Total pop = 0 Tick Complete = 515
9749 Fitness = 1192.9000000000065
9750 Ai: 49 Gen: 47
9751 Sim Starting
9752 Sim over Total pop = 4 Tick Complete = 2001
9753 Fitness = 4826.429999999766
9754 Mean Fitness of Gen 47 is 1950.504399999573 and
    best fitness 5600.490000000014
9755 Ai: 0 Gen: 48
9756 Sim Starting
9757 Sim over Total pop = 0 Tick Complete = 224
9758 Fitness = 638.179999999756
9759 Ai: 1 Gen: 48
9760 Sim Starting
9761 Sim over Total pop = 0 Tick Complete = 402
9762 Fitness = 1185.489999999958
```

```
9763 Ai: 2 Gen: 48
9764 Sim Starting
9765 Sim over Total pop = 0 Tick Complete = 127
9766 Fitness = 274.09999999998564
9767 Ai: 3 Gen: 48
9768 Sim Starting
9769 Sim over Total pop = 0 Tick Complete = 196
9770 Fitness = 418.4399999999784
9771 Ai: 4 Gen: 48
9772 Sim Starting
9773 Sim over Total pop = 0 Tick Complete = 150
9774 Fitness = 383.54999999999245
9775 Ai: 5 Gen: 48
9776 Sim Starting
9777 Sim over Total pop = 0 Tick Complete = 265
9778 Fitness = 1173.3399999999788
9779 Ai: 6 Gen: 48
9780 Sim Starting
9781 Sim over Total pop = 0 Tick Complete = 122
9782 Fitness = 259.09999999998445
9783 Ai: 7 Gen: 48
9784 Sim Starting
9785 Sim over Total pop = 0 Tick Complete = 645
9786 Fitness = 1946.6799999999137
9787 Ai: 8 Gen: 48
9788 Sim Starting
9789 Sim over Total pop = 0 Tick Complete = 465
9790 Fitness = 1663.259999999968
9791 Ai: 9 Gen: 48
9792 Sim Starting
9793 Sim over Total pop = 0 Tick Complete = 189
9794 Fitness = 462.90999999998525
9795 Ai: 10 Gen: 48
9796 Sim Starting
9797 Sim over Total pop = 5 Tick Complete = 2001
9798 Fitness = 3095.929999999952
9799 Ai: 11 Gen: 48
9800 Sim Starting
9801 Sim over Total pop = 0 Tick Complete = 337
9802 Fitness = 1510.9599999999728
9803 Ai: 12 Gen: 48
9804 Sim Starting
9805 Sim over Total pop = 0 Tick Complete = 70
9806 Fitness = 627.0
```

```
9807 Ai: 13 Gen: 48
9808 Sim Starting
9809 Sim over Total pop = 0 Tick Complete = 697
9810 Fitness = 1769.0399999999997
9811 Ai: 14 Gen: 48
9812 Sim Starting
9813 Sim over Total pop = 0 Tick Complete = 70
9814 Fitness = 764.0
9815 Ai: 15 Gen: 48
9816 Sim Starting
9817 Sim over Total pop = 0 Tick Complete = 168
9818 Fitness = 653.2999999999902
9819 Ai: 16 Gen: 48
9820 Sim Starting
9821 Sim over Total pop = 0 Tick Complete = 1359
9822 Fitness = 2643.2800000000407
9823 Ai: 17 Gen: 48
9824 Sim Starting
9825 Sim over Total pop = 0 Tick Complete = 495
9826 Fitness = 1072.8599999999578
9827 Ai: 18 Gen: 48
9828 Sim Starting
9829 Sim over Total pop = 0 Tick Complete = 902
9830 Fitness = 1931.0699999999829
9831 Ai: 19 Gen: 48
9832 Sim Starting
9833 Sim over Total pop = 0 Tick Complete = 216
9834 Fitness = 1065.6699999999976
9835 Ai: 20 Gen: 48
9836 Sim Starting
9837 Sim over Total pop = 0 Tick Complete = 283
9838 Fitness = 1083.269999999989
9839 Ai: 21 Gen: 48
9840 Sim Starting
9841 Sim over Total pop = 0 Tick Complete = 65
9842 Fitness = 575.0799999999883
9843 Ai: 22 Gen: 48
9844 Sim Starting
9845 Sim over Total pop = 0 Tick Complete = 513
9846 Fitness = 1074.3399999999683
9847 Ai: 23 Gen: 48
9848 Sim Starting
9849 Sim over Total pop = 0 Tick Complete = 320
9850 Fitness = 905.8799999999869
```

```
9851 Ai: 24 Gen: 48
9852 Sim Starting
9853 Sim over Total pop = 0 Tick Complete = 201
9854 Fitness = 749.2299999999772
9855 Ai: 25 Gen: 48
9856 Sim Starting
9857 Sim over Total pop = 0 Tick Complete = 1723
9858 Fitness = 3514.52000000001228
9859 Ai: 26 Gen: 48
9860 Sim Starting
9861 Sim over Total pop = 0 Tick Complete = 1069
9862 Fitness = 1993.16000000000449
9863 Ai: 27 Gen: 48
9864 Sim Starting
9865 Sim over Total pop = 0 Tick Complete = 49
9866 Fitness = 15.9199999999897
9867 Ai: 28 Gen: 48
9868 Sim Starting
9869 Sim over Total pop = 0 Tick Complete = 1378
9870 Fitness = 3170.2599999999297
9871 Ai: 29 Gen: 48
9872 Sim Starting
9873 Sim over Total pop = 0 Tick Complete = 756
9874 Fitness = 1402.6699999999778
9875 Ai: 30 Gen: 48
9876 Sim Starting
9877 Sim over Total pop = 0 Tick Complete = 70
9878 Fitness = 825.0
9879 Ai: 31 Gen: 48
9880 Sim Starting
9881 Sim over Total pop = 7 Tick Complete = 2001
9882 Fitness = 4612.239999999827
9883 Ai: 32 Gen: 48
9884 Sim Starting
9885 Sim over Total pop = 2 Tick Complete = 2001
9886 Fitness = 3360.4399999997904
9887 Ai: 33 Gen: 48
9888 Sim Starting
9889 Sim over Total pop = 0 Tick Complete = 537
9890 Fitness = 589.1799999999878
9891 Ai: 34 Gen: 48
9892 Sim Starting
9893 Sim over Total pop = 0 Tick Complete = 141
9894 Fitness = 716.2199999999907
```

```
9895 Ai: 35 Gen: 48
9896 Sim Starting
9897 Sim over Total pop = 0 Tick Complete = 51
9898 Fitness = 103.65999999999467
9899 Ai: 36 Gen: 48
9900 Sim Starting
9901 Sim over Total pop = 0 Tick Complete = 88
9902 Fitness = 381.73999999998847
9903 Ai: 37 Gen: 48
9904 Sim Starting
9905 Sim over Total pop = 0 Tick Complete = 1524
9906 Fitness = 2040.3699999999887
9907 Ai: 38 Gen: 48
9908 Sim Starting
9909 Sim over Total pop = 4 Tick Complete = 2001
9910 Fitness = 4228.399999999685
9911 Ai: 39 Gen: 48
9912 Sim Starting
9913 Sim over Total pop = 7 Tick Complete = 2001
9914 Fitness = 5501.830000000022
9915 Ai: 40 Gen: 48
9916 Sim Starting
9917 Sim over Total pop = 0 Tick Complete = 62
9918 Fitness = 588.6299999999925
9919 Ai: 41 Gen: 48
9920 Sim Starting
9921 Sim over Total pop = 0 Tick Complete = 1401
9922 Fitness = 2336.4599999999823
9923 Ai: 42 Gen: 48
9924 Sim Starting
9925 Sim over Total pop = 0 Tick Complete = 62
9926 Fitness = 568.2399999999905
9927 Ai: 43 Gen: 48
9928 Sim Starting
9929 Sim over Total pop = 0 Tick Complete = 803
9930 Fitness = 1963.100000000046
9931 Ai: 44 Gen: 48
9932 Sim Starting
9933 Sim over Total pop = 0 Tick Complete = 70
9934 Fitness = 771.3099999999934
9935 Ai: 45 Gen: 48
9936 Sim Starting
9937 Sim over Total pop = 2 Tick Complete = 2001
9938 Fitness = 3323.489999999842
```

```
9939 Ai: 46 Gen: 48
9940 Sim Starting
9941 Sim over Total pop = 0 Tick Complete = 70
9942 Fitness = 967.0
9943 Ai: 47 Gen: 48
9944 Sim Starting
9945 Sim over Total pop = 0 Tick Complete = 764
9946 Fitness = 1640.15000000000135
9947 Ai: 48 Gen: 48
9948 Sim Starting
9949 Sim over Total pop = 0 Tick Complete = 1951
9950 Fitness = 3777.759999999868
9951 Mean Fitness of Gen 48 is 1557.504285714257 and
best fitness 5501.830000000022
9952 Ai: 0 Gen: 49
9953 Sim Starting
9954 Sim over Total pop = 0 Tick Complete = 412
9955 Fitness = 1002.0499999999605
9956 Ai: 1 Gen: 49
9957 Sim Starting
9958 Sim over Total pop = 0 Tick Complete = 425
9959 Fitness = 710.3399999999825
9960 Ai: 2 Gen: 49
9961 Sim Starting
9962 Sim over Total pop = 0 Tick Complete = 657
9963 Fitness = 1269.469999999981
9964 Ai: 3 Gen: 49
9965 Sim Starting
9966 Sim over Total pop = 0 Tick Complete = 86
9967 Fitness = 717.4899999999976
9968 Ai: 4 Gen: 49
9969 Sim Starting
9970 Sim over Total pop = 0 Tick Complete = 425
9971 Fitness = 1143.729999999995
9972 Ai: 5 Gen: 49
9973 Sim Starting
9974 Sim over Total pop = 0 Tick Complete = 732
9975 Fitness = 1899.4199999999857
9976 Ai: 6 Gen: 49
9977 Sim Starting
9978 Sim over Total pop = 0 Tick Complete = 345
9979 Fitness = 1952.66000000000094
9980 Ai: 7 Gen: 49
9981 Sim Starting
```

```
9982 Sim over Total pop = 0 Tick Complete = 893
9983 Fitness = 2091.379999999988
9984 Ai: 8 Gen: 49
9985 Sim Starting
9986 Sim over Total pop = 0 Tick Complete = 459
9987 Fitness = 921.7400000000068
9988 Ai: 9 Gen: 49
9989 Sim Starting
9990 Sim over Total pop = 0 Tick Complete = 210
9991 Fitness = 1091.839999999992
9992 Ai: 10 Gen: 49
9993 Sim Starting
9994 Sim over Total pop = 0 Tick Complete = 1276
9995 Fitness = 1932.419999998436
9996 Ai: 11 Gen: 49
9997 Sim Starting
9998 Sim over Total pop = 0 Tick Complete = 1032
9999 Fitness = 2025.479999999123
10000 Ai: 12 Gen: 49
10001 Sim Starting
10002 Sim over Total pop = 0 Tick Complete = 237
10003 Fitness = 1270.179999999896
10004 Ai: 13 Gen: 49
10005 Sim Starting
10006 Sim over Total pop = 0 Tick Complete = 90
10007 Fitness = 690.739999999942
10008 Ai: 14 Gen: 49
10009 Sim Starting
10010 Sim over Total pop = 0 Tick Complete = 373
10011 Fitness = 1014.009999999928
10012 Ai: 15 Gen: 49
10013 Sim Starting
10014 Sim over Total pop = 0 Tick Complete = 118
10015 Fitness = 624.819999999948
10016 Ai: 16 Gen: 49
10017 Sim Starting
10018 Sim over Total pop = 0 Tick Complete = 460
10019 Fitness = 1908.309999999827
10020 Ai: 17 Gen: 49
10021 Sim Starting
10022 Sim over Total pop = 0 Tick Complete = 732
10023 Fitness = 1807.639999999808
10024 Ai: 18 Gen: 49
10025 Sim Starting
```

```
10026 Sim over Total pop = 0 Tick Complete = 70
10027 Fitness = 891.0
10028 Ai: 19 Gen: 49
10029 Sim Starting
10030 Sim over Total pop = 0 Tick Complete = 73
10031 Fitness = 604.199999999993
10032 Ai: 20 Gen: 49
10033 Sim Starting
10034 Sim over Total pop = 0 Tick Complete = 212
10035 Fitness = 1056.9100000000014
10036 Ai: 21 Gen: 49
10037 Sim Starting
10038 Sim over Total pop = 0 Tick Complete = 70
10039 Fitness = 901.0
10040 Ai: 22 Gen: 49
10041 Sim Starting
10042 Sim over Total pop = 0 Tick Complete = 223
10043 Fitness = 978.1299999999815
10044 Ai: 23 Gen: 49
10045 Sim Starting
10046 Sim over Total pop = 0 Tick Complete = 70
10047 Fitness = 962.0
10048 Ai: 24 Gen: 49
10049 Sim Starting
10050 Sim over Total pop = 0 Tick Complete = 492
10051 Fitness = 1501.549999999977
10052 Ai: 25 Gen: 49
10053 Sim Starting
10054 Sim over Total pop = 0 Tick Complete = 1405
10055 Fitness = 2692.62000000002
10056 Ai: 26 Gen: 49
10057 Sim Starting
10058 Sim over Total pop = 6 Tick Complete = 2001
10059 Fitness = 4609.319999999628
10060 Ai: 27 Gen: 49
10061 Sim Starting
10062 Sim over Total pop = 0 Tick Complete = 1106
10063 Fitness = 1618.879999999986
10064 Ai: 28 Gen: 49
10065 Sim Starting
10066 Sim over Total pop = 0 Tick Complete = 63
10067 Fitness = 589.7199999999922
10068 Ai: 29 Gen: 49
10069 Sim Starting
```

```
10070 Sim over Total pop = 0 Tick Complete = 580
10071 Fitness = 1790.98000000000137
10072 Ai: 30 Gen: 49
10073 Sim Starting
10074 Sim over Total pop = 4 Tick Complete = 2001
10075 Fitness = 4070.0699999997955
10076 Ai: 31 Gen: 49
10077 Sim Starting
10078 Sim over Total pop = 0 Tick Complete = 74
10079 Fitness = 612.749999999996
10080 Ai: 32 Gen: 49
10081 Sim Starting
10082 Sim over Total pop = 0 Tick Complete = 48
10083 Fitness = -2.9000000000009026
10084 Ai: 33 Gen: 49
10085 Sim Starting
10086 Sim over Total pop = 0 Tick Complete = 885
10087 Fitness = 1175.5199999999795
10088 Ai: 34 Gen: 49
10089 Sim Starting
10090 Sim over Total pop = 0 Tick Complete = 856
10091 Fitness = 1513.269999999995
10092 Ai: 35 Gen: 49
10093 Sim Starting
10094 Sim over Total pop = 0 Tick Complete = 70
10095 Fitness = 698.0
10096 Ai: 36 Gen: 49
10097 Sim Starting
10098 Sim over Total pop = 0 Tick Complete = 62
10099 Fitness = 579.7299999999898
10100 Ai: 37 Gen: 49
10101 Sim Starting
10102 Sim over Total pop = 4 Tick Complete = 2001
10103 Fitness = 2836.419999999986
10104 Ai: 38 Gen: 49
10105 Sim Starting
10106 Sim over Total pop = 0 Tick Complete = 1424
10107 Fitness = 3923.560000000171
10108 Ai: 39 Gen: 49
10109 Sim Starting
10110 Sim over Total pop = 0 Tick Complete = 49
10111 Fitness = 17.76999999999323
10112 Ai: 40 Gen: 49
10113 Sim Starting
```

```
10114 Sim over Total pop = 0 Tick Complete = 829
10115 Fitness = 3625.2200000001667
10116 Ai: 41 Gen: 49
10117 Sim Starting
10118 Sim over Total pop = 0 Tick Complete = 116
10119 Fitness = 684.2699999999872
10120 Ai: 42 Gen: 49
10121 Sim Starting
10122 Sim over Total pop = 0 Tick Complete = 1043
10123 Fitness = 1730.2399999999413
10124 Ai: 43 Gen: 49
10125 Sim Starting
10126 Sim over Total pop = 0 Tick Complete = 441
10127 Fitness = 681.4600000000001
10128 Ai: 44 Gen: 49
10129 Sim Starting
10130 Sim over Total pop = 2 Tick Complete = 2001
10131 Fitness = 2409.0199999997876
10132 Ai: 45 Gen: 49
10133 Sim Starting
10134 Sim over Total pop = 0 Tick Complete = 1192
10135 Fitness = 1736.2799999999859
10136 Ai: 46 Gen: 49
10137 Sim Starting
10138 Sim over Total pop = 0 Tick Complete = 1960
10139 Fitness = 3297.199999999978
10140 Ai: 47 Gen: 49
10141 Sim Starting
10142 Sim over Total pop = 0 Tick Complete = 1198
10143 Fitness = 1780.4799999999818
10144 Ai: 48 Gen: 49
10145 Sim Starting
10146 Sim over Total pop = 0 Tick Complete = 1416
10147 Fitness = 3322.7000000000353
10148 Ai: 49 Gen: 49
10149 Sim Starting
10150 Sim over Total pop = 5 Tick Complete = 2001
10151 Fitness = 2847.609999999994
10152 Mean Fitness of Gen 49 is 1596.1739999999795 and
    best fitness 4609.319999999628
10153 Ai: 0 Gen: 50
10154 Sim Starting
10155 Sim over Total pop = 0 Tick Complete = 69
10156 Fitness = 709.2499999999993
```

```
10157 Ai: 1 Gen: 50
10158 Sim Starting
10159 Sim over Total pop = 0 Tick Complete = 228
10160 Fitness = 1481.3699999999878
10161 Ai: 2 Gen: 50
10162 Sim Starting
10163 Sim over Total pop = 0 Tick Complete = 197
10164 Fitness = 469.0299999999949
10165 Ai: 3 Gen: 50
10166 Sim Starting
10167 Sim over Total pop = 4 Tick Complete = 2001
10168 Fitness = 3345.159999999995
10169 Ai: 4 Gen: 50
10170 Sim Starting
10171 Sim over Total pop = 0 Tick Complete = 111
10172 Fitness = 938.529999999992
10173 Ai: 5 Gen: 50
10174 Sim Starting
10175 Sim over Total pop = 0 Tick Complete = 163
10176 Fitness = 822.5399999999927
10177 Ai: 6 Gen: 50
10178 Sim Starting
10179 Sim over Total pop = 0 Tick Complete = 101
10180 Fitness = 329.6999999999842
10181 Ai: 7 Gen: 50
10182 Sim Starting
10183 Sim over Total pop = 0 Tick Complete = 512
10184 Fitness = 1838.0899999999674
10185 Ai: 8 Gen: 50
10186 Sim Starting
10187 Sim over Total pop = 0 Tick Complete = 215
10188 Fitness = 1090.2199999999657
10189 Ai: 9 Gen: 50
10190 Sim Starting
10191 Sim over Total pop = 0 Tick Complete = 68
10192 Fitness = 554.9399999999946
10193 Ai: 10 Gen: 50
10194 Sim Starting
10195 Sim over Total pop = 0 Tick Complete = 182
10196 Fitness = 1058.2999999999884
10197 Ai: 11 Gen: 50
10198 Sim Starting
10199 Sim over Total pop = 0 Tick Complete = 62
10200 Fitness = 607.8099999999937
```

```
10201 Ai: 12 Gen: 50
10202 Sim Starting
10203 Sim over Total pop = 0 Tick Complete = 713
10204 Fitness = 2263.3900000000012
10205 Ai: 13 Gen: 50
10206 Sim Starting
10207 Sim over Total pop = 0 Tick Complete = 578
10208 Fitness = 1078.5599999999904
10209 Ai: 14 Gen: 50
10210 Sim Starting
10211 Sim over Total pop = 0 Tick Complete = 62
10212 Fitness = 546.2899999999896
10213 Ai: 15 Gen: 50
10214 Sim Starting
10215 Sim over Total pop = 0 Tick Complete = 1431
10216 Fitness = 2373.399999999975
10217 Ai: 16 Gen: 50
10218 Sim Starting
10219 Sim over Total pop = 2 Tick Complete = 2001
10220 Fitness = 3358.90999999986
10221 Ai: 17 Gen: 50
10222 Sim Starting
10223 Sim over Total pop = 0 Tick Complete = 665
10224 Fitness = 1773.1999999999875
10225 Ai: 18 Gen: 50
10226 Sim Starting
10227 Sim over Total pop = 0 Tick Complete = 63
10228 Fitness = 581.069999999941
10229 Ai: 19 Gen: 50
10230 Sim Starting
10231 Sim over Total pop = 0 Tick Complete = 292
10232 Fitness = 1408.7799999999816
10233 Ai: 20 Gen: 50
10234 Sim Starting
10235 Sim over Total pop = 0 Tick Complete = 62
10236 Fitness = 549.7899999999973
10237 Ai: 21 Gen: 50
10238 Sim Starting
10239 Sim over Total pop = 0 Tick Complete = 137
10240 Fitness = 824.2799999999871
10241 Ai: 22 Gen: 50
10242 Sim Starting
10243 Sim over Total pop = 0 Tick Complete = 68
10244 Fitness = 721.5699999999941
```

```
10245 Ai: 23 Gen: 50
10246 Sim Starting
10247 Sim over Total pop = 0 Tick Complete = 268
10248 Fitness = 1305.2199999999978
10249 Ai: 24 Gen: 50
10250 Sim Starting
10251 Sim over Total pop = 0 Tick Complete = 1757
10252 Fitness = 3392.3299999998635
10253 Ai: 25 Gen: 50
10254 Sim Starting
10255 Sim over Total pop = 0 Tick Complete = 673
10256 Fitness = 1381.509999999943
10257 Ai: 26 Gen: 50
10258 Sim Starting
10259 Sim over Total pop = 0 Tick Complete = 1287
10260 Fitness = 3266.439999999957
10261 Ai: 27 Gen: 50
10262 Sim Starting
10263 Sim over Total pop = 3 Tick Complete = 2001
10264 Fitness = 4207.530000000283
10265 Ai: 28 Gen: 50
10266 Sim Starting
10267 Sim over Total pop = 2 Tick Complete = 2001
10268 Fitness = 2950.119999999876
10269 Ai: 29 Gen: 50
10270 Sim Starting
10271 Sim over Total pop = 3 Tick Complete = 2001
10272 Fitness = 2606.4000000000287
10273 Ai: 30 Gen: 50
10274 Sim Starting
10275 Sim over Total pop = 4 Tick Complete = 2001
10276 Fitness = 3547.8699999999562
10277 Ai: 31 Gen: 50
10278 Sim Starting
10279 Sim over Total pop = 4 Tick Complete = 2001
10280 Fitness = 3285.4200000000133
10281 Ai: 32 Gen: 50
10282 Sim Starting
10283 Sim over Total pop = 2 Tick Complete = 2001
10284 Fitness = 2177.3299999999986
10285 Ai: 33 Gen: 50
10286 Sim Starting
10287 Sim over Total pop = 0 Tick Complete = 49
10288 Fitness = -4.230000000006115
```

```
10289 Ai: 34 Gen: 50
10290 Sim Starting
10291 Sim over Total pop = 6 Tick Complete = 2001
10292 Fitness = 3744.820000000105
10293 Ai: 35 Gen: 50
10294 Sim Starting
10295 Sim over Total pop = 0 Tick Complete = 78
10296 Fitness = 834.459999999994
10297 Ai: 36 Gen: 50
10298 Sim Starting
10299 Sim over Total pop = 4 Tick Complete = 2001
10300 Fitness = 3722.349999999935
10301 Ai: 37 Gen: 50
10302 Sim Starting
10303 Sim over Total pop = 4 Tick Complete = 2001
10304 Fitness = 4458.259999999635
10305 Ai: 38 Gen: 50
10306 Sim Starting
10307 Sim over Total pop = 6 Tick Complete = 2001
10308 Fitness = 3358.059999999367
10309 Ai: 39 Gen: 50
10310 Sim Starting
10311 Sim over Total pop = 6 Tick Complete = 2001
10312 Fitness = 4597.69999999963
10313 Ai: 40 Gen: 50
10314 Sim Starting
10315 Sim over Total pop = 0 Tick Complete = 50
10316 Fitness = -0.31000000000684835
10317 Ai: 41 Gen: 50
10318 Sim Starting
10319 Sim over Total pop = 2 Tick Complete = 2001
10320 Fitness = 2926.959999999876
10321 Ai: 42 Gen: 50
10322 Sim Starting
10323 Sim over Total pop = 0 Tick Complete = 1618
10324 Fitness = 2586.70000000001
10325 Ai: 43 Gen: 50
10326 Sim Starting
10327 Sim over Total pop = 0 Tick Complete = 1657
10328 Fitness = 2801.760000000071
10329 Ai: 44 Gen: 50
10330 Sim Starting
10331 Sim over Total pop = 3 Tick Complete = 2001
10332 Fitness = 3773.9100000002127
```

```
10333 Ai: 45 Gen: 50
10334 Sim Starting
10335 Sim over Total pop = 2 Tick Complete = 2001
10336 Fitness = 2518.399999999947
10337 Ai: 46 Gen: 50
10338 Sim Starting
10339 Sim over Total pop = 0 Tick Complete = 765
10340 Fitness = 1302.4599999999855
10341 Ai: 47 Gen: 50
10342 Sim Starting
10343 Sim over Total pop = 2 Tick Complete = 2001
10344 Fitness = 3867.2899999998913
10345 Ai: 48 Gen: 50
10346 Sim Starting
10347 Sim over Total pop = 0 Tick Complete = 600
10348 Fitness = 610.139999999996
10349 Ai: 49 Gen: 50
10350 Sim Starting
10351 Sim over Total pop = 2 Tick Complete = 2001
10352 Fitness = 2196.579999999945
10353 Mean Fitness of Gen 50 is 2002.7931999999773 and
    best fitness 4597.69999999963
10354
10355 Best genome:
10356 Key: 1736
10357 Fitness: 4597.69999999963
10358 Nodes:
10359     0 DefaultNodeGene(key=0, bias=1.
    7838202919363655, response=1.0, activation=tanh,
    aggregation=sum)
10360     1 DefaultNodeGene(key=1, bias=4.
    1099153149781955, response=1.0, activation=tanh,
    aggregation=sum)
10361     2 DefaultNodeGene(key=2, bias=0.
    21126685557613015, response=1.0, activation=tanh,
    aggregation=sum)
10362     3 DefaultNodeGene(key=3, bias=-1.
    3510072204195165, response=1.0, activation=tanh,
    aggregation=sum)
10363     4 DefaultNodeGene(key=4, bias=0.
    7759242487686421, response=1.0, activation=tanh,
    aggregation=sum)
10364     5 DefaultNodeGene(key=5, bias=1.
    569630876727179, response=1.0, activation=tanh,
```

```
10364 aggregation=sum)
10365     6 DefaultNodeGene(key=6, bias=1.
347774873824458, response=1.0, activation=tanh,
aggregation=sum)
10366     7 DefaultNodeGene(key=7, bias=1.
795587269084096, response=1.0, activation=tanh,
aggregation=sum)
10367     8 DefaultNodeGene(key=8, bias=1.
6639586603777312, response=1.0, activation=tanh,
aggregation=sum)
10368     9 DefaultNodeGene(key=9, bias=-1.
1363493447739288, response=1.0, activation=tanh,
aggregation=sum)
10369    10 DefaultNodeGene(key=10, bias=-3.
5766452384351344, response=1.0, activation=tanh,
aggregation=sum)
10370    11 DefaultNodeGene(key=11, bias=-2.
069651850846228, response=1.0, activation=tanh,
aggregation=sum)
10371   156 DefaultNodeGene(key=156, bias=-2.
5549299503844285, response=1.0, activation=tanh,
aggregation=sum)
10372   157 DefaultNodeGene(key=157, bias=-0.
8395896909062373, response=1.0, activation=tanh,
aggregation=sum)
10373   158 DefaultNodeGene(key=158, bias=-1.
736159459757169, response=1.0, activation=tanh,
aggregation=sum)
10374   160 DefaultNodeGene(key=160, bias=-2.
7800297582856603, response=1.0, activation=tanh,
aggregation=sum)
10375   161 DefaultNodeGene(key=161, bias=0.
15888882048389869, response=1.0, activation=tanh,
aggregation=sum)
10376   434 DefaultNodeGene(key=434, bias=2.
124698317879295, response=1.0, activation=tanh,
aggregation=sum)
10377   524 DefaultNodeGene(key=524, bias=0.
49382978259449184, response=1.0, activation=tanh,
aggregation=sum)
10378   566 DefaultNodeGene(key=566, bias=1.
3917367009790156, response=1.0, activation=tanh,
aggregation=sum)
10379   646 DefaultNodeGene(key=646, bias=-0.
```

```
10379 07999176417293902, response=1.0, activation=tanh,
      aggregation=sum)
10380 Connections:
10381     DefaultConnectionGene(key=(-50, 157), weight=0
      .4291388393084986, enabled=True)
10382     DefaultConnectionGene(key=(-50, 158), weight=0
      .45446677317064205, enabled=True)
10383     DefaultConnectionGene(key=(-50, 160), weight=-
      2.22483745076772, enabled=False)
10384     DefaultConnectionGene(key=(-50, 161), weight=1
      .4201436635772393, enabled=True)
10385     DefaultConnectionGene(key=(-49, 156), weight=0
      .10886239062638756, enabled=True)
10386     DefaultConnectionGene(key=(-49, 157), weight=2
      .901610510540934, enabled=True)
10387     DefaultConnectionGene(key=(-49, 158), weight=-
      0.09794374089756819, enabled=True)
10388     DefaultConnectionGene(key=(-49, 160), weight=2
      .759909473198224, enabled=True)
10389     DefaultConnectionGene(key=(-49, 161), weight=-
      0.6109855783595375, enabled=True)
10390     DefaultConnectionGene(key=(-48, 156), weight=-
      0.22903798468334702, enabled=True)
10391     DefaultConnectionGene(key=(-48, 157), weight=-
      2.01511944026042, enabled=True)
10392     DefaultConnectionGene(key=(-48, 158), weight=0
      .49029185969426414, enabled=True)
10393     DefaultConnectionGene(key=(-48, 160), weight=0
      .11810120643156169, enabled=False)
10394     DefaultConnectionGene(key=(-48, 161), weight=0
      .37909690854520706, enabled=True)
10395     DefaultConnectionGene(key=(-47, 156), weight=-
      0.3638541454490928, enabled=False)
10396     DefaultConnectionGene(key=(-47, 157), weight=1
      .2445024430867138, enabled=True)
10397     DefaultConnectionGene(key=(-47, 158), weight=4
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10398     DefaultConnectionGene(key=(-47, 160), weight=1
      .5882407680487485, enabled=True)
10399     DefaultConnectionGene(key=(-47, 161), weight=-
      0.08051262274137472, enabled=True)
10400     DefaultConnectionGene(key=(-46, 156), weight=-
      5.7448951768677405, enabled=True)
10401     DefaultConnectionGene(key=(-46, 157), weight=0
```

```
10401 .7154419972271209, enabled=False)
10402     DefaultConnectionGene(key=(-46, 158), weight=0
.5130751843483727, enabled=True)
10403     DefaultConnectionGene(key=(-46, 160), weight=2
.9845044258091633, enabled=True)
10404     DefaultConnectionGene(key=(-46, 161), weight=-
2.141021076483349, enabled=False)
10405     DefaultConnectionGene(key=(-45, 2), weight=1.
9299553803512275, enabled=True)
10406     DefaultConnectionGene(key=(-45, 156), weight=-
1.0155521759255606, enabled=True)
10407     DefaultConnectionGene(key=(-45, 157), weight=-
0.29935685860062855, enabled=True)
10408     DefaultConnectionGene(key=(-45, 158), weight=-
0.012614825297089571, enabled=True)
10409     DefaultConnectionGene(key=(-45, 160), weight=2
.0346021698791388, enabled=True)
10410     DefaultConnectionGene(key=(-45, 161), weight=-
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10411     DefaultConnectionGene(key=(-44, 156), weight=0
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10412     DefaultConnectionGene(key=(-44, 157), weight=0
.8455004637955142, enabled=True)
10413     DefaultConnectionGene(key=(-44, 158), weight=0
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10414     DefaultConnectionGene(key=(-44, 160), weight=1
.2857217294945347, enabled=True)
10415     DefaultConnectionGene(key=(-44, 161), weight=-
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10416     DefaultConnectionGene(key=(-43, 156), weight=1
.2071645385544287, enabled=True)
10417     DefaultConnectionGene(key=(-43, 157), weight=-
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10418     DefaultConnectionGene(key=(-43, 158), weight=-
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10419     DefaultConnectionGene(key=(-43, 160), weight=-
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10420     DefaultConnectionGene(key=(-43, 161), weight=0
.21241607528188525, enabled=True)
10421     DefaultConnectionGene(key=(-42, 156), weight=-
2.007228544218345, enabled=True)
10422     DefaultConnectionGene(key=(-42, 157), weight=-
5.061991331156749, enabled=True)
10423     DefaultConnectionGene(key=(-42, 158), weight=-
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```
10423 1.7107972900045696, enabled=True)
10424      DefaultConnectionGene(key=(-42, 160), weight=0
.8716029626400408, enabled=True)
10425      DefaultConnectionGene(key=(-42, 161), weight=-
1.2878386084342535, enabled=True)
10426      DefaultConnectionGene(key=(-41, 156), weight=-
2.74730951597574, enabled=True)
10427      DefaultConnectionGene(key=(-41, 157), weight=-
0.8345829691045853, enabled=True)
10428      DefaultConnectionGene(key=(-41, 158), weight=-
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10429      DefaultConnectionGene(key=(-41, 160), weight=1
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10431      DefaultConnectionGene(key=(-40, 156), weight=-
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10433      DefaultConnectionGene(key=(-40, 158), weight=-
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10435      DefaultConnectionGene(key=(-40, 161), weight=0
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10436      DefaultConnectionGene(key=(-39, 8), weight=-0.
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10437      DefaultConnectionGene(key=(-39, 156), weight=2
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10438      DefaultConnectionGene(key=(-39, 157), weight=-
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10439      DefaultConnectionGene(key=(-39, 158), weight=-
0.1153998449190099, enabled=True)
10440      DefaultConnectionGene(key=(-39, 160), weight=-
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10441      DefaultConnectionGene(key=(-39, 161), weight=0
.06200167377334622, enabled=True)
10442      DefaultConnectionGene(key=(-39, 524), weight=-
1.6115282424636497, enabled=True)
10443      DefaultConnectionGene(key=(-38, 156), weight=-
1.4605935172059892, enabled=True)
10444      DefaultConnectionGene(key=(-38, 157), weight=0
.7578303444705239, enabled=True)
10445      DefaultConnectionGene(key=(-38, 158), weight=-
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```
10445 1.6715627091363119, enabled=True)
10446      DefaultConnectionGene(key=(-38, 160), weight=-
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10447      DefaultConnectionGene(key=(-38, 161), weight=0
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10448      DefaultConnectionGene(key=(-37, 156), weight=0
.1963653755045884, enabled=True)
10449      DefaultConnectionGene(key=(-37, 157), weight=-
1.4169852068110198, enabled=True)
10450      DefaultConnectionGene(key=(-37, 158), weight=5
.07325745622495, enabled=True)
10451      DefaultConnectionGene(key=(-37, 160), weight=-
1.145029202456552, enabled=True)
10452      DefaultConnectionGene(key=(-37, 161), weight=2
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10453      DefaultConnectionGene(key=(-36, 2), weight=-2.
0934978864554115, enabled=True)
10454      DefaultConnectionGene(key=(-36, 6), weight=0.
4931123882825983, enabled=True)
10455      DefaultConnectionGene(key=(-36, 156), weight=0
.2588200045721851, enabled=True)
10456      DefaultConnectionGene(key=(-36, 157), weight=1
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10457      DefaultConnectionGene(key=(-36, 158), weight=-
1.0507042882392075, enabled=True)
10458      DefaultConnectionGene(key=(-36, 160), weight=1
.1244393040929375, enabled=True)
10459      DefaultConnectionGene(key=(-36, 161), weight=-
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10460      DefaultConnectionGene(key=(-35, 157), weight=0
.40534887631226013, enabled=True)
10461      DefaultConnectionGene(key=(-35, 158), weight=-
0.6828115589243557, enabled=True)
10462      DefaultConnectionGene(key=(-35, 160), weight=-
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10463      DefaultConnectionGene(key=(-35, 161), weight=-
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10464      DefaultConnectionGene(key=(-34, 156), weight=-
1.7085619367457694, enabled=True)
10465      DefaultConnectionGene(key=(-34, 157), weight=-
0.046090027576483894, enabled=True)
10466      DefaultConnectionGene(key=(-34, 158), weight=2
.203892266574043, enabled=True)
10467      DefaultConnectionGene(key=(-34, 160), weight=0
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```
10467 .5083245988038679, enabled=True)
10468     DefaultConnectionGene(key=(-34, 161), weight=-
1.5234831083431357, enabled=False)
10469     DefaultConnectionGene(key=(-33, 156), weight=3
.7312190165569135, enabled=True)
10470     DefaultConnectionGene(key=(-33, 157), weight=-
1.597567448547883, enabled=True)
10471     DefaultConnectionGene(key=(-33, 158), weight=-
0.7440114728099652, enabled=True)
10472     DefaultConnectionGene(key=(-33, 160), weight=1
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10473     DefaultConnectionGene(key=(-33, 161), weight=-
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10474     DefaultConnectionGene(key=(-32, 156), weight=2
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10475     DefaultConnectionGene(key=(-32, 157), weight=-
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10476     DefaultConnectionGene(key=(-32, 158), weight=-
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10477     DefaultConnectionGene(key=(-32, 160), weight=1
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10482     DefaultConnectionGene(key=(-31, 160), weight=2
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10483     DefaultConnectionGene(key=(-31, 161), weight=-
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10484     DefaultConnectionGene(key=(-30, 156), weight=-
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10485     DefaultConnectionGene(key=(-30, 157), weight=0
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10487     DefaultConnectionGene(key=(-30, 160), weight=-
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10488     DefaultConnectionGene(key=(-30, 161), weight=-
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10489     DefaultConnectionGene(key=(-29, 156), weight=-
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```
10489 1.8058596768647495, enabled=True)
10490      DefaultConnectionGene(key=(-29, 157), weight=-
0.7187619328583423, enabled=True)
10491      DefaultConnectionGene(key=(-29, 158), weight=0
.9092666979115038, enabled=True)
10492      DefaultConnectionGene(key=(-29, 160), weight=1
.5663462735707172, enabled=False)
10493      DefaultConnectionGene(key=(-29, 161), weight=0
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10494      DefaultConnectionGene(key=(-28, 156), weight=1
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10495      DefaultConnectionGene(key=(-28, 157), weight=0
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10499      DefaultConnectionGene(key=(-27, 156), weight=-
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10506      DefaultConnectionGene(key=(-26, 157), weight=0
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10507      DefaultConnectionGene(key=(-26, 161), weight=2
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10508      DefaultConnectionGene(key=(-25, 10), weight=2.
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10509      DefaultConnectionGene(key=(-25, 11), weight=1.
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10510      DefaultConnectionGene(key=(-25, 156), weight=-
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10511      DefaultConnectionGene(key=(-25, 157), weight=-
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10511 3.387832222748051, enabled=True)
10512      DefaultConnectionGene(key=(-25, 160), weight=0
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10515      DefaultConnectionGene(key=(-24, 157), weight=-0.9615179738833093, enabled=True)
10516      DefaultConnectionGene(key=(-24, 160), weight=-2.058306076720464, enabled=True)
10517      DefaultConnectionGene(key=(-24, 161), weight=4
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10518      DefaultConnectionGene(key=(-23, 3), weight=-0.
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10519      DefaultConnectionGene(key=(-23, 156), weight=-1.7302200673452208, enabled=True)
10520      DefaultConnectionGene(key=(-23, 157), weight=0
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10521      DefaultConnectionGene(key=(-23, 158), weight=-1.2286269730194468, enabled=True)
10522      DefaultConnectionGene(key=(-23, 160), weight=2
.372142670086357, enabled=True)
10523      DefaultConnectionGene(key=(-23, 161), weight=0
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10525      DefaultConnectionGene(key=(-22, 157), weight=-3.6542698145825, enabled=True)
10526      DefaultConnectionGene(key=(-22, 158), weight=1
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10528      DefaultConnectionGene(key=(-21, 156), weight=-1.75385500445417, enabled=True)
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10533      DefaultConnectionGene(key=(-20, 157), weight=-
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10533 0.318698585007793, enabled=True)
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10535      DefaultConnectionGene(key=(-20, 160), weight=-
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10536      DefaultConnectionGene(key=(-20, 161), weight=3
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10537      DefaultConnectionGene(key=(-19, 156), weight=2
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10538      DefaultConnectionGene(key=(-19, 157), weight=-
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10539      DefaultConnectionGene(key=(-19, 158), weight=2
.3704407738745363, enabled=True)
10540      DefaultConnectionGene(key=(-19, 160), weight=-
0.9807959129857085, enabled=True)
10541      DefaultConnectionGene(key=(-19, 161), weight=0
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10542      DefaultConnectionGene(key=(-18, 156), weight=-
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10543      DefaultConnectionGene(key=(-18, 157), weight=1
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10544      DefaultConnectionGene(key=(-18, 158), weight=-
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10547      DefaultConnectionGene(key=(-17, 156), weight=0
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10548      DefaultConnectionGene(key=(-17, 157), weight=-
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10549      DefaultConnectionGene(key=(-17, 160), weight=0
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10551      DefaultConnectionGene(key=(-16, 5), weight=0.
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10552      DefaultConnectionGene(key=(-16, 156), weight=-
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10553      DefaultConnectionGene(key=(-16, 157), weight=1
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10554      DefaultConnectionGene(key=(-16, 158), weight=2
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10555      DefaultConnectionGene(key=(-16, 160), weight=-
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10555 1.38999588287096, enabled=True)
10556      DefaultConnectionGene(key=(-16, 161), weight=0
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10557      DefaultConnectionGene(key=(-16, 524), weight=1
.2429136354025803, enabled=True)
10558      DefaultConnectionGene(key=(-15, 156), weight=1
.3499002405309115, enabled=False)
10559      DefaultConnectionGene(key=(-15, 157), weight=-
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10560      DefaultConnectionGene(key=(-15, 158), weight=-
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10561      DefaultConnectionGene(key=(-15, 160), weight=-
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10562      DefaultConnectionGene(key=(-15, 161), weight=0
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10563      DefaultConnectionGene(key=(-14, 6), weight=-0.
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10564      DefaultConnectionGene(key=(-14, 156), weight=-
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10566      DefaultConnectionGene(key=(-14, 161), weight=1
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10567      DefaultConnectionGene(key=(-13, 156), weight=3
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10568      DefaultConnectionGene(key=(-13, 157), weight=-
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10569      DefaultConnectionGene(key=(-13, 158), weight=1
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10570      DefaultConnectionGene(key=(-13, 160), weight=-
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10573      DefaultConnectionGene(key=(-12, 157), weight=-
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10577      DefaultConnectionGene(key=(-12, 646), weight=2
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10577 .587060060866982, enabled=True)
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10579     DefaultConnectionGene(key=(-11, 157), weight=-
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10581     DefaultConnectionGene(key=(-11, 160), weight=0
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10586     DefaultConnectionGene(key=(-10, 160), weight=1
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10590     DefaultConnectionGene(key=(-9, 158), weight=1.
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10591     DefaultConnectionGene(key=(-9, 160), weight=-1
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10592     DefaultConnectionGene(key=(-9, 161), weight=-0
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10595     DefaultConnectionGene(key=(-8, 158), weight=0.
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10596     DefaultConnectionGene(key=(-8, 160), weight=0.
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10597     DefaultConnectionGene(key=(-8, 161), weight=-1
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10598     DefaultConnectionGene(key=(-8, 566), weight=1.
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10599     DefaultConnectionGene(key=(-7, 156), weight=-2
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10601     DefaultConnectionGene(key=(-7, 158), weight=-1
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10605     DefaultConnectionGene(key=(-6, 158), weight=0.
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10606     DefaultConnectionGene(key=(-6, 160), weight=0.
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10612     DefaultConnectionGene(key=(-5, 161), weight=-0
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10613     DefaultConnectionGene(key=(-5, 566), weight=-2
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10614     DefaultConnectionGene(key=(-4, 156), weight=-1
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10615     DefaultConnectionGene(key=(-4, 157), weight=0.
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10616     DefaultConnectionGene(key=(-4, 158), weight=-0
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10617     DefaultConnectionGene(key=(-4, 160), weight=0.
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10621     DefaultConnectionGene(key=(-3, 158), weight=1.
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10623      DefaultConnectionGene(key=(-3, 161), weight=0.
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10627      DefaultConnectionGene(key=(-2, 160), weight=1.
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10628      DefaultConnectionGene(key=(-1, 156), weight=1.
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10638      DefaultConnectionGene(key=(156, 4), weight=0.
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, 2543.060000000073, 3112.589999999853, 2709.
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0800000001245, 2732.4700000000184, 3511.
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9500000011035, 3685.329999999753, 3094.
5099999998365, 2031.149999999949, 2994.
229999999985, 2897.7599999998715, 2324.
6399999999658, 2368.60999999996, 3327.
9500000002945, 2846.4099999999717, 1675.
4299999999885, 2461.3399999999588, 2804.
6699999998873, 3603.0500000006027, 3043.
179999999964, 3574.6099999999674, 3753.
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, 3990.7300000001696, 5249.640000000085, 4193.
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, 5316.230000000125, 4513.739999998215, 4896.
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, 5501.830000000022, 4609.319999999628, 4597.
69999999963]
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991666666635, 915.2540425531834, 1139.
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36520000002, 1021.0703999999813, 1335.  
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3537254902085, 1661.2147999999843, 1673.  
1805882352617, 1950.5043999999573, 1557.  
504285714257, 1596.1739999999795, 2002.  
7931999999773]  
10696 libpng warning: iCCP: known incorrect sRGB profile  
10697 libpng warning: iCCP: known incorrect sRGB profile  
10698 libpng warning: iCCP: known incorrect sRGB profile  
10699  
10700 Process finished with exit code 0  
10701
```