Python file: **Muts\_Tourn**  (from Mariana parallel with original fitness)

Testing Mutations

**Fixed:** **tournament\_sel** single\_point\_XO Pop=500 Gens =300

Running time aprox min

A graph of different colored lines

Description automatically generated

Run #1, Generation #300: Best Fitness: 131, Time: 68.39 seconds

Run #1, Generation #300: Best Fitness: 213, Time: 68.6 seconds

Run #1, Generation #300: Best Fitness: 202, Time: 69.51 seconds

Run #1, Generation #300: Best Fitness: 327, Time: 73.91 seconds

Run #2, Generation #300: Best Fitness: 122, Time: 61.78 seconds

Run #2, Generation #300: Best Fitness: 223, Time: 62.43 seconds

Run #2, Generation #300: Best Fitness: 201, Time: 63.62 seconds

Run #2, Generation #300: Best Fitness: 349, Time: 67.65 seconds

Run #3, Generation #300: Best Fitness: 124, Time: 50.93 seconds

Run #3, Generation #300: Best Fitness: 224, Time: 51.4 seconds

Run #3, Generation #300: Best Fitness: 204, Time: 51.32 seconds

Run #3, Generation #300: Best Fitness: 350, Time: 55.25 seconds

Run #4, Generation #300: Best Fitness: 136, Time: 53.23 seconds

Run #4, Generation #300: Best Fitness: 258, Time: 54.09 seconds

Run #4, Generation #300: Best Fitness: 200, Time: 54.04 seconds

Run #4, Generation #300: Best Fitness: 326, Time: 58.31 seconds

Run #5, Generation #300: Best Fitness: **122**, Time: 54.18 seconds

Run #5, Generation #300: Best Fitness: 277, Time: 55.61 seconds

Run #5, Generation #300: Best Fitness: 203, Time: 56.24 seconds

Run #5, Generation #300: Best Fitness: 331, Time: 60.77 seconds

Run #6, Generation #300: Best Fitness: 137, Time: 56.96 seconds

Run #6, Generation #300: Best Fitness: 225, Time: 56.79 seconds

Run #6, Generation #300: Best Fitness: 199, Time: 56.91 seconds

Run #6, Generation #300: Best Fitness: 356, Time: 61.63 seconds

Run #7, Generation #300: Best Fitness: 124, Time: 55.05 seconds

Run #7, Generation #300: Best Fitness: 272, Time: 54.75 seconds

Run #7, Generation #300: Best Fitness: 207, Time: 55.76 seconds

Run #7, Generation #300: Best Fitness: 358, Time: 59.22 seconds

Run #8, Generation #300: Best Fitness: 135, Time: 54.4 seconds

Run #8, Generation #300: Best Fitness: 248, Time: 55.15 seconds

Run #8, Generation #300: Best Fitness: 203, Time: 55.89 seconds

Run #8, Generation #300: Best Fitness: 311, Time: 63.03 seconds

Run #9, Generation #300: Best Fitness: 137, Time: 57.8 seconds

Run #9, Generation #300: Best Fitness: 242, Time: 59.17 seconds

Run #9, Generation #300: Best Fitness: 202, Time: 58.78 seconds

Run #9, Generation #300: Best Fitness: 318, Time: 60.04 seconds

Run #10, Generation #300: Best Fitness: 131, Time: 55.5 seconds

Run #10, Generation #300: Best Fitness: 262, Time: 55.57 seconds

Run #10, Generation #300: Best Fitness: 201, Time: 55.24 seconds

Run #10, Generation #300: Best Fitness: 342, Time: 52.28 seconds

Run #1, Generation #300: Best Fitness: 336, Time: 48.57 seconds

Run #2, Generation #300: Best Fitness: 386, Time: 73.03 seconds

Run #3, Generation #300: Best Fitness: 382, Time: 68.92 seconds

Run #4, Generation #300: Best Fitness: 370, Time: 64.36 seconds

Run #5, Generation #300: Best Fitness: 342, Time: 63.29 seconds

Run #6, Generation #300: Best Fitness: 335, Time: 65.51 seconds

Run #7, Generation #300: Best Fitness: 382, Time: 65.28 seconds

Run #8, Generation #300: Best Fitness: 315, Time: 68.86 seconds

Run #9, Generation #300: Best Fitness: 380, Time: 67.04 seconds

Run #10, Generation #300: Best Fitness: 355, Time: 65.68 seconds