

MP3 Performance Analysis Report

DATASET SUMMARY

Total runs: 150

Sizes: 20, 1000, 10000, 30000, 50000

Sort types: Insertion, Selection (Recursive), Selection (Iterative), Merge, Quick (qsort_r)

Fields: gen, ip

List types: 1

Seeds: 111, 222, 333

PERFORMANCE AT N=50000 (field=gen, listtype=1)

Quick (qsort_r): 14.793 ms (×1.00)

Merge: 36.970 ms (×2.50)

Selection (Iterative): 8222.210 ms (×555.82)

Selection (Recursive): 8899.944 ms (×601.63)

Insertion: 9613.271 ms (×649.85)

PERFORMANCE AT N=50000 (field=ip, listtype=1)

Quick (qsort_r): 11.320 ms (×1.00)

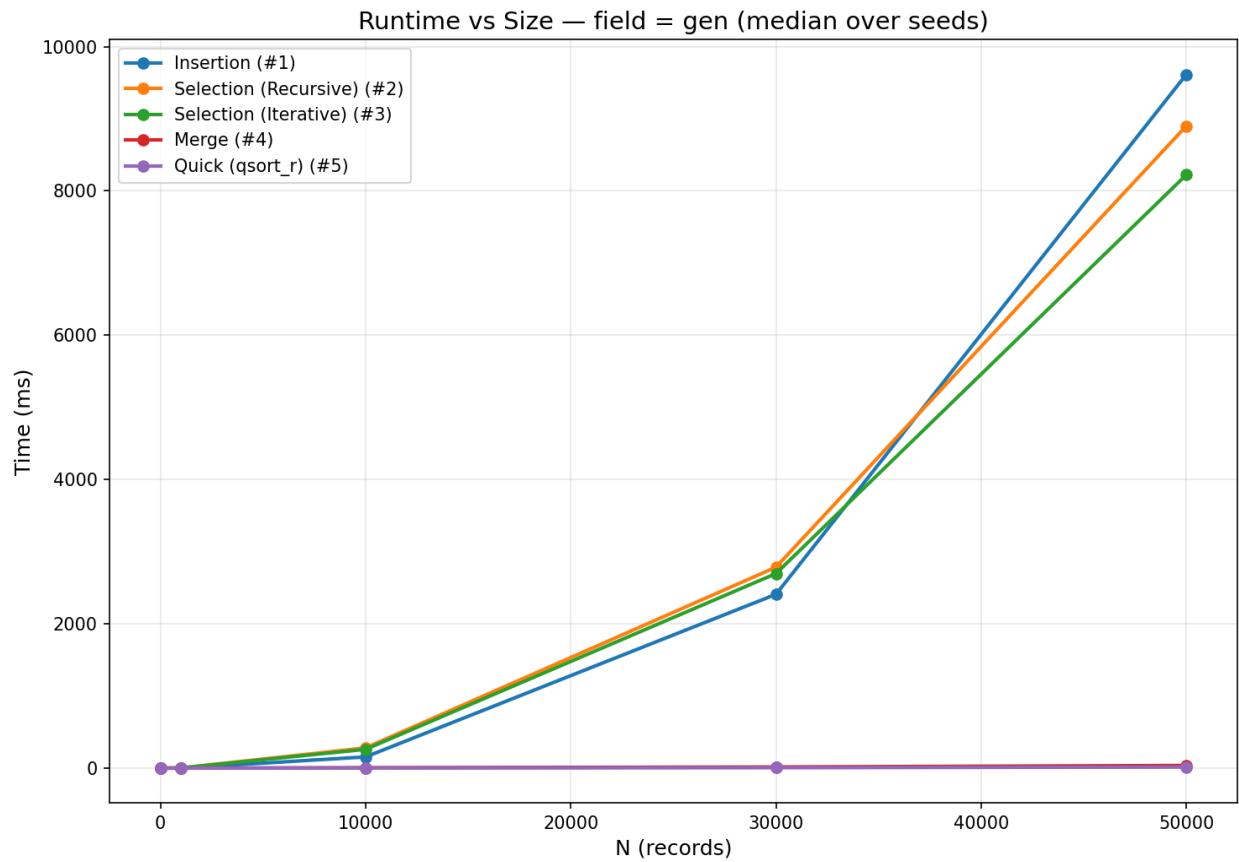
Merge: 39.014 ms (×3.45)

Selection (Recursive): 8181.537 ms (×722.75)

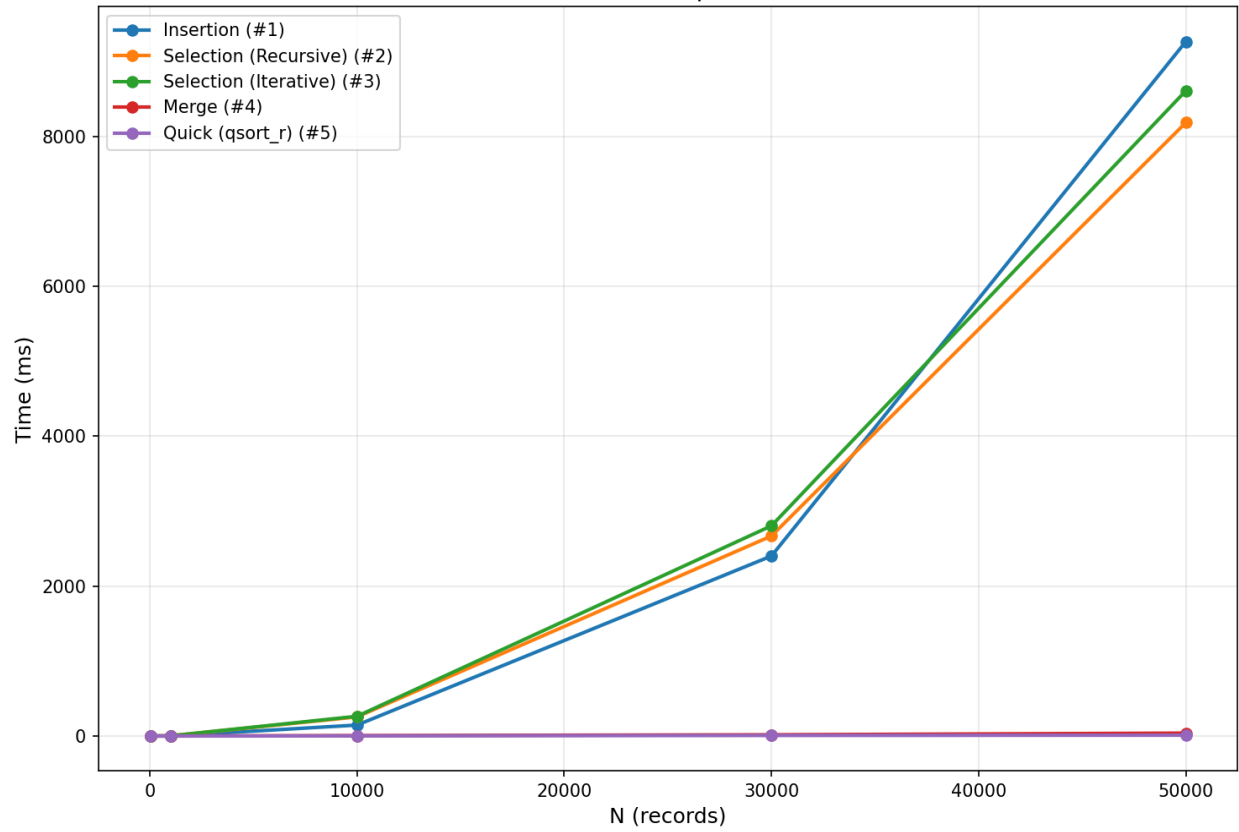
Selection (Iterative): 8606.214 ms (×760.27)

Insertion: 9262.528 ms (×818.24)

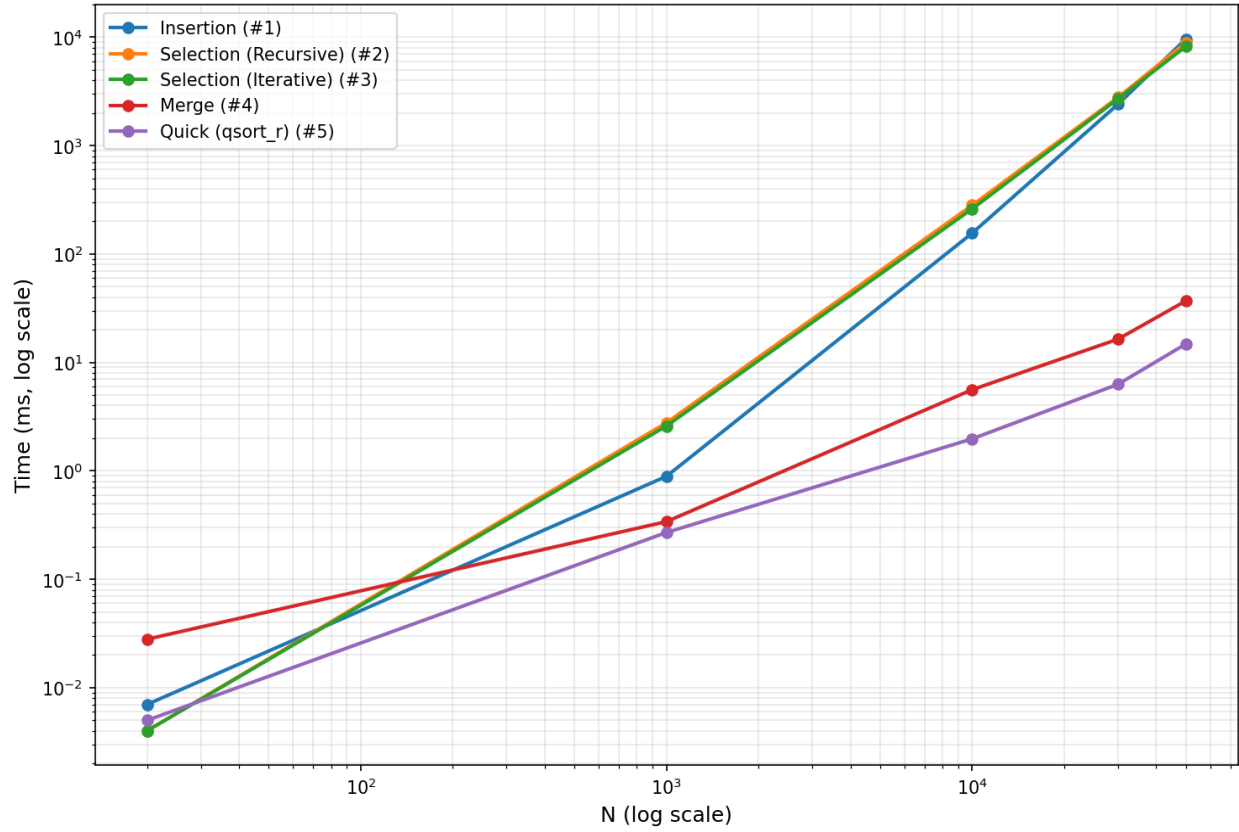
Performance Graphs



Runtime vs Size — field = ip (median over seeds)



Log-Log Runtime — field = gen (median over seeds)



Log-Log Runtime — field = ip (median over seeds)

