Joint Pair Report — MinHeap vs MaxHeap

Pair 4 — A: Nurzhaina (MinHeap), B: Diana (MaxHeap)

Theory

Same asymptotics: peek $\Theta(1)$; insert/extract/update $O(\log n)$; buildFrom $\Theta(n)$; merge $\Theta(n+m)$.

Empirics (fill with your numbers)

Insert your median times from heaps.csv; include plots for Min/Max.

Code Quality

Shared: generics, metrics, heapify. Improvements: locator map, docs on non-stability.

Recommendation

Choose Min/Max by required priority semantics; for heavy key-updates consider pairing/Fibonacci (out of scope).