DAA-Hands-on-

Implement:

insertion sort: DAA Hands On 2/insertionSort.py

selection sort: DAA Hands On 2/selectionSort.py

bubble sort: DAA Hands On 2/bubbleSort.py

In the discussion:

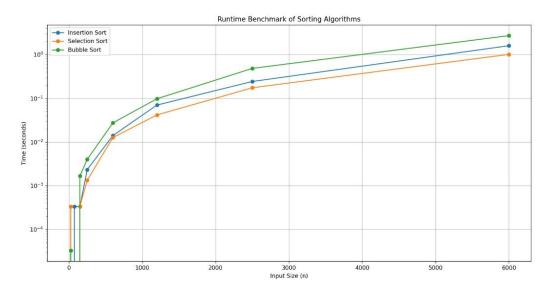Post a link to your GitHub repository(s) with the source code.

Argue selection sort correctness. Solution: DAA-HANDS-ON/blob/main/3550_correctnessofselectionsort.pdf

Benchmark the runtime of each algorithm. Your benchmarks should include information about your computer (RAM, CPU etc.) and be run with various input sizes; from small (array of size 5,10,20) up to large arrays (where your computer is struggling). I should see a plot of time vs input size n. Feel free to use benchmarking software.

System Details:

Host Name: Charitha Sri Borra,CPU: Intel64 Family 6 Model 140 Stepping 1, GenuineIntel,Memory: 15.7 GB,Total Cores: 8,Python Version: 3.8.2

Figure 1

Runtime Benchmark of Sorting Algorithms

x=4194. y=2.17678