

Review QUIZ 1 of 1

Computational Complexity (Lower Bound) for The Sorting Problem

(All questions are based on Lecture Notes. Go to the Lecture Notes and fully understand the topics!)

Q1. Describe the **Heap Sort** algorithm? **Worst-case** running time of heap sort?

[GO TO Lecture Note Slide #29, #30, #31, #43]

Q2. Worst-case running time for **Top-down binary heap building**? Explain.

[GO TO Lecture Note Slide #32]

Q3. Worst-case running time for **Bottom-up binary heap building**? Explain.
[\[GO TO Lecture Note Slide #32\]](#)

Q4. What is the **worst-case Lower Bound for sorting n items only by comparison** of keys? Explain!
[\[GO TO Lecture Note Slide ##53, #62, #63, #65, #66, #67, #68\]](#)