Wormhole: A Fast Ordered Index for In-memory Data Management (II)

NOTE: Your slides/presentation only need to cover background information necessary to answer the given questions (in a clear and well-organized manner). You are allowed to borrow contents from other resources, such as online slides, as long as you acknowledge them. The presentation should be mostly question-focused and proceed mostly in a Q&A format. Please include the questions in your slides. Don’t write detailed answers in the slides and read them to the class. Instead, use bullet points, graphs, or animations to explain your answers to the class.

In your Q&A report, use text to more thoroughly answer the questions. Include a short paragraph at the beginning of the report to summarize the paper.

(1) Use Figure 5 as an example to explain how a MetaTrieHT is built.

(2) Assume the anchor “Alexander” is in the MetaTrieHT, and the search key is “Alexandria”. Show how many steps (hash table lookups) are required to complete the first phase.

(3) Use Figure 5 as an example to show how the search key “Jacob” is found in the tree.