

Read Ch. 6 Section 4 (pp. 417+) closely and answer the following questions.

1. What kind of implementation of a binary tree is discussed in Ch. 6 Section #4?
2. Write an example mathematical expression with at least 4 operators and draw a diagram like Figure 6-21 on p. 418 that represents the linear representation of the vector. (Draw the vector horizontally.)
3. FULLY EXPLAIN how the author uses null flags used in the linear representation method for a binary tree?
4. If a child is found at location n in the vector for the linear representation of a B-tree, in what position could you find the child's parent node?
5. FULLY EXPLAIN the advantages and disadvantages of using the linear representation of a binary search tree. Continue on the back of the paper if necessary.
6. FULLY EXPLAIN the advantages and disadvantages of using the linear representation of a heap. Continue on the back of the paper if necessary.
7. What is the Big O efficiency for an insert operation on the linear representation of a heap?