Assignment Questions

1. Compare and contrast B-trees and B+ trees. Explain their structure and use cases.
2. Explain the insertion operation in a B-tree with an example. How does it maintain balance?
3. Describe the deletion process in a B+ tree. What challenges are faced and how are they resolved?
4. Discuss the advantages and disadvantages of using B+ trees over B-trees in database indexing.
5. Construct a B+ tree of order 4 by inserting the following sequence of keys: 10, 20, 5, 6, 12, 30, 7, 17. Show each step clearly.