Assignment of the Problem: 25.10.2024

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Problem 9: Case Study of Binary Tree- Write a modular program to implement binary search tree variant AVL Tree and extend it to B-tree. The program must contain the following-

1. Define node structure
2. Insertion in AVL Tree
3. Deletion from AVL Tree
4. Searching in AVL Tree

Extend the above tree into B-tree and implement the following-

1. Define node structure
2. Insertion in B Tree
3. Deletion from B Tree
4. Searching in B Tree

Test the above methods on the following Data Set. The Degree of B-Tree is 5.

Data={2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97}

Program must consider the degree based on the choice.