JAWABAN NO 1

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mk : Algoritma struktur data 2

Jawaban UAS NO 1

Binary search tree

```
public class BinarySearchTree {
    Public class Node {
      // instrance variable of node class
        Public int data ;
        Public Node left ;
        public Node right ;
      // constructor
        Public Node (int data){
            This.data = data ;
            This.left = null ;
            This.right = null ;
        }
    }
    // instance variable
      Public node root ;
    // constructor for intialise the root null By Perault
      Public Binary Search tree() {
      This.root = null ;
    }
    // insert method to insert the new date
      Public Node (int item) {
            key : item ;
            Lef = right = null ;
```

```
Public Node Search (Node root, int key){
  // Basecase : root is null or not
    IF (root : Null){
      // insert the new data, if root is null
         root : New Node (Newdata);
      // return the current root to his sub tree
         return root;
    }
    // Here checking For: root data is greater or equal
       to new Data or notelse if (root.data ? : newdat
    ){
     // If current root data is greater than the new dat
       then now procces the right sub-tree root.right =
       insert (root.right, new data);
    } else {
     // if current root data is less than the new data
       then now process the right sub-tree
      root. right : insert (root. right, new Data);
    }
      return root;
    }
      //Travergal
       Public void pre order () {
           preorder (root);
       }
        public void pre order (Node root) {
            if (root = = Null) {
            return ;
          }
           system.out.print (root.data + " ");
            preorder (root.left);
            preorder (root.Right);
        }
```