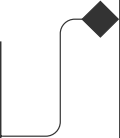


# Binary Search Tree

Node
- key: int - left: Node* - right: Node*
+ Node(key: int): constructor

BinarySearchTree
- root: Node*
+ BinarySearchTree(): constructor - AddNodePrivate(key: int, Ptr: Node*): void - RemoveNodePrivate(key: int, parent: Node*): void - CreateNode(int key): Node* - ReturnNode(int key): Node* - ReturnNodePrivateint (key: int, Ptr: Node*): Node* - FindSmallestPrivate(Ptr: Node*): int - RemoveRootMatch(): void - RemoveMatch(parent: Node*, match: Node*, left: bool): void - RemoveSubTree(Ptr: Node*): void - PrintInOrderPrivate(Ptr: Node*): void + AddNode(key: int): void + RemoveNode(key: int): void + ReturnRootKey(): int + FindSmallest(): int + PrintChildren(key: int): void + PrintInOrder(): void



Node
- keys: int* - children: Node** - curr_num: int - t: int - leaf: bool
+ Node(t: int, leaf: bool): constructor + void Bypass(); + Node* Search(key: int); + int FindKey(key: int); + void InsertPartial(key: int); + void splitChild(i: int, y: Node*); + void Delete(key: int); + void DeleteLeafKey(index: int); + void DeleteNonLeafKey(index: int); + int GettingPred(index: int); + int GettingSuccessor(index: int); + void Filling(index: int); + void TakePrevious(index: int); + void TakeFollowing(index: int); + void Merge(index: int);

# B-Tree

BTree
- root: Node*
BTree(t: int): constructor Search(key: int): Node* Insert(key: int): void Delete(key: int): void

