

```
struct rightThreadedBSTNode{
int key;
int size;//Total no of nodes in the subtree rooted at node
int rightThread;// 1, if right link is a thread to its inorder successor
struct rightThreadedBSTNode *leftChild;
struct rightThreadedBSTNode *rightChild;};
typedef struct rightThreadedBSTNode rTBSTNode;
typedef struct rightThreadedBSTNode* rTBSTNodePtr;
void createRightThreadedBST(rTBSTNodePtr *root){ *root = NULL;}
rTBSTNodePtr getRightThreadedTreeNode(); //Allocate a node dynamically
void displayRightThreadedBST(rTBSTNodePtr root, char *fileName) ;// Use graphviz to display tree graphically
rTBSTNodePtr rtbstSearch(rTBSTNodePtr *root, int data); -O(h)// returns the pointer of the node having key
value equal to data (successful search) or returns NULL
15 Points— void inorder(rTBSTNodePtr *root, int *List); // Non-recursive and without using stack
10 points—int rtbstInsert(rTBSTNodePtr *root, int data); – O(h)
40 points—int rtbstDelete(rTBSTNodePtr *root, int data); //- O(h)
20 Points—rTBSTNodePtr kthElement(rTBSTNodePtr *root, int k); //- O(h) returns the pointer of the node having
the k-th smallest key value or returns NULL
Note: Don’t change the function definition. No marks for partial implementation
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