	TEST CASES FOR BINARY SEARCH TREE			
PROJECT NAME	Binary Search Tree			
CREATED BY	Pushpak Sunil Rane			
DATE OF CREATION	12-10-2024			
TEST CASE ID	**TEST CASE**	**TEST DATA**	**EXPECTED RESULTS**	**ACTUAL RESULT**
TC_01	Insert nodes	Insert nodes: "Pushpak", "Clay", "Ree", "See", "Queen", "Alice" with their specific phone-numbers.	Insertion of nodes in BST..... Inserted Pushpak:530-233-4562 Inserted Clay:998-453-2307 Inserted Ree:765-342-5645 Inserted See:765-342-5645 Inserted Queen:540-332-4532 Inserted Alice:530-234-6079	Insertion of nodes in BST..... Inserted Pushpak:530-233-4562 Inserted Clay:998-453-2307 Inserted Ree:765-342-5645 Inserted See:765-342-5645 Inserted Queen:540-332-4532 Inserted Alice:530-234-6079
TC_02	Perform inorder traversal after inserting nodes.	Insert nodes: "Pushpak", "Clay", "Ree", "See", "Queen", "Alice".	Inorder traversal: [('Alice', '530-234-6079'), ('Clay', '998-453-2307'), ('Pushpak', '530-233-4562'), ('Queen', '540-332-4532'), ('Ree', '765-342-5645'), ('See', '765-342-5645')]	Inorder traversal: [('Alice', '530-234-6079'), ('Clay', '998-453-2307'), ('Pushpak', '530-233-4562'), ('Queen', '540-332-4532'), ('Ree', '765-342-5645'), ('See', '765-342-5645')]
TC_03	Search for an existing node.	Search for "Alice".	"530-234-6079"	"530-234-6079"
TC_04	Search for a non-existent node.	Search for "John".	"No records found in the database."	"No records found in the database."
TC_05	Delete a node with no children (leaf node).	Delete node with key "Queen".	Inorder traversal after deletion : [('Alice', '530-234-6079'), ('Clay', '998-453-2307'), ('Pushpak', '530-233-4562'), ('Ree', '765-342-5645'), ('See', '765-342-5645')]	Inorder traversal after deletion : [('Alice', '530-234-6079'), ('Clay', '998-453-2307'), ('Pushpak', '530-233-4562'), ('Ree', '765-342-5645'), ('See', '765-342-5645')]
TC_06	Delete a node with one child.	Delete node with key "Clay".	Inorder traversal: [('Alice', '530-234-6079'), ('Pushpak', '530-233-4562'), ('Queen', '540-332-4532'), ('Ree', '765-342-5645'), ('See', '765-342-5645')]	Inorder traversal: [('Alice', '530-234-6079'), ('Pushpak', '530-233-4562'), ('Queen', '540-332-4532'), ('Ree', '765-342-5645'), ('See', '765-342-5645')]
TC_07	Delete a node with two children.	Delete node with key "Pushpak".	Inorder traversal: [('Alice', '530-234-6079'), ('Clay', '998-453-2307'), ('Queen', '540-332-4532'), ('Ree', '765-342-5645'), ('See', '765-342-5645')] (Node "Queen" replaces "Pushpak")	Inorder traversal: [('Alice', '530-234-6079'), ('Clay', '998-453-2307'), ('Queen', '540-332-4532'), ('Ree', '765-342-5645'), ('See', '765-342-5645')] (Node "Queen" replaces "Pushpak")
TC_08	Attempt to delete a non-existent node.	Delete node with key "John".	"Node doesn't exist."	"Node doesn't exist."
TC_09	Search in an empty tree.	Search for "Alice" in an empty tree.	"No records found in the database."	"No records found in the database."
TC_10	Attempt to delete from an empty tree.	Delete node with key "Alice" in an empty tree.	"Node doesn't exist."	"Node doesn't exist."