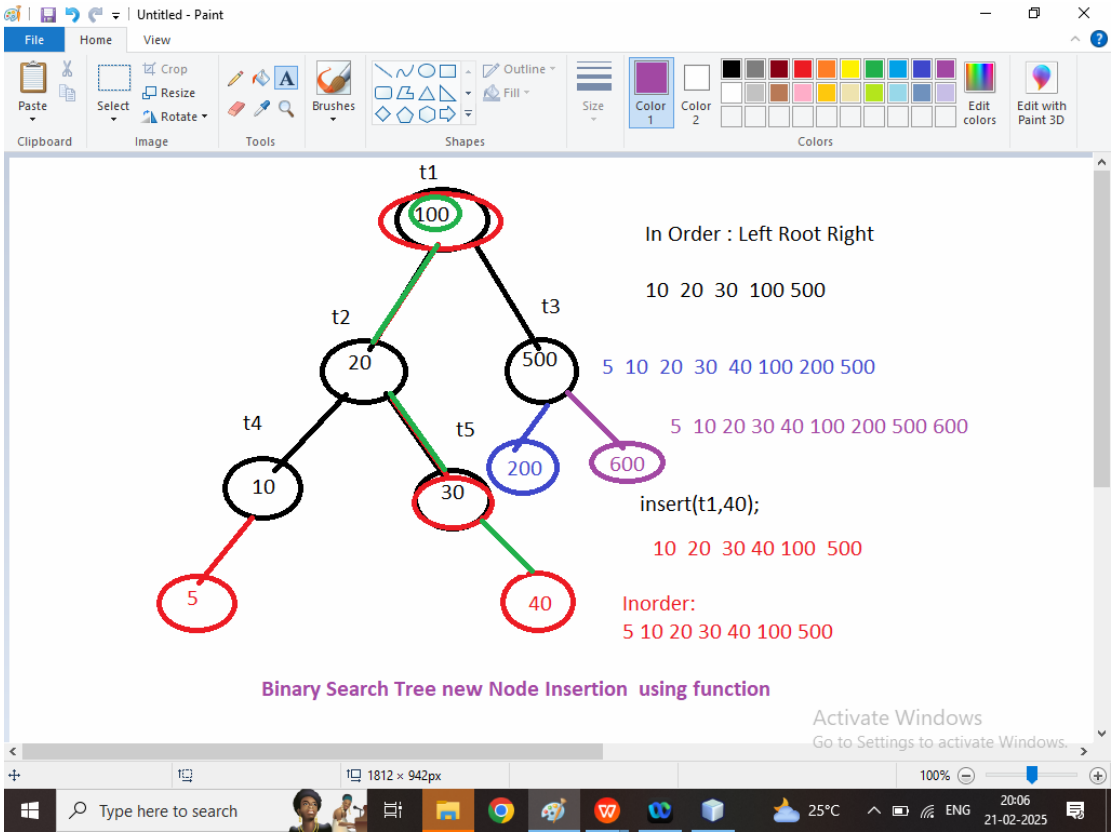


```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package dsaj6;

/**
 *
 * @author Admin
 */
public class Tree {

   public int data;
   Tree left;
   Tree right;

   public Tree(int data) {
      this.data = data;
      left = null;
      right = null;
   }

   public static void preOrder(Tree root) {
      if (root == null) {
         return;
      }
```

```
    //ROOT LEFT RIGHT
    System.out.print("===>" + root.data);//ROOT
    preOrder(root.left);//for Left Sub Tree
    preOrder(root.right);

  }

  public static void inOrder(Tree root) {
    if (root == null) {
       return;
    }
    // LEFT ROOT RIGHT

    inOrder(root.left);//for Left Sub Tree
     System.out.print("===>" + root.data);//ROOT
    inOrder(root.right);//Right Sub Tree

  }

  public static void postOrder(Tree root) {
    if (root == null) {
       return;
    }
    // LEFT RIGHT  ROOT

     postOrder(root.left);//for Left Sub Tree

    postOrder(root.right);//Right Sub Tree
     System.out.print("===>" + root.data);//ROOT

  }

  public static Tree insert(Tree root,int data){
     if(root==null){
        return new Tree(data);
     }
     if(data<root.data){
        root.left=insert(root.left, data);
     }else{
        root.right=insert(root.right, data);
     }
     return root;
  }
 public static void main(String[] args) {
    Tree t1 = new Tree(100);
    Tree t2 = new Tree(20);
    t1.left = t2;
    Tree t3 = new Tree(500);
    t1.right = t3;
    Tree t4 = new Tree(10);
    t1.left.left = t4;
    Tree t5 = new Tree(30);
    t1.left.right = t5;

    insert(t1, 40);
    insert(t1, 5);
    insert(t1, 200);
```

```
        insert(t1, 600);
       System.out.println("\nPrint Data of Tree Using In order Tree Trevarsal ");
        inOrder(t1);


    }
}
```

```
/*
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 */
package dsaj6;

/**
 *
 * @author Admin
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public class Tree {

    public int data;
    Tree left;
    Tree right;

    public Tree(int data) {
        this.data = data;
        left = null;
        right = null;
    }

    public static void preOrder(Tree root) {
        if (root == null) {
            return;
        }
        //ROOT LEFT RIGHT
        System.out.print("===>" + root.data);//ROOT
        preOrder(root.left);//for Left Sub Tree
        preOrder(root.right);

    }

     public static void inOrder(Tree root) {
        if (root == null) {
            return;
        }
        // LEFT ROOT RIGHT

        inOrder(root.left);//for Left Sub Tree
          System.out.print("===>" + root.data);//ROOT
        inOrder(root.right);//Right Sub Tree

    }

     public static void postOrder(Tree root) {
        if (root == null) {
            return;
```

```
    }
    // LEFT RIGHT  ROOT

     postOrder(root.left);//for Left Sub Tree

    postOrder(root.right);//Right Sub Tree
      System.out.print("===>" + root.data);//ROOT

}

 public static Tree insert(Tree root,int data){
     if(root==null){
        return new Tree(data);
     }
     if(data<root.data){
        root.left=insert(root.left, data);
     }else{
        root.right=insert(root.right, data);
     }
     return root;
 }
 public static Tree delete(Tree root,int data){
     if(root==null){
        return root;
     }
     //find the node to be deleted
     if(data<root.data){
        root.left=delete(root.left, data);
     }
     else if(data>root.data){
        root.right=delete(root.right, data);
     }else{
     //case 1 and 2 one or no child
       if(root.left==null){
          return root.right;
       }else if(root.right==null){
          return root.left;
       }
     }
     return root;
 }
public static void main(String[] args) {
    Tree t1 = new Tree(100);
    Tree t2 = new Tree(20);
    t1.left = t2;
    Tree t3 = new Tree(500);
    t1.right = t3;
    Tree t4 = new Tree(10);
    t1.left.left = t4;
    Tree t5 = new Tree(30);
    t1.left.right = t5;

    insert(t1, 40);
    insert(t1, 5);
    delete(t1, 5);
    delete(t1, 30);
   System.out.println("\nPrint Data of Tree Using In order Tree Trevarsal ");
```

```
        inOrder(t1);


    }
}
```