

```
import java.util.Scanner;
```

```
class Node {
```

```
    int key;
```

```
    Node left, right;
```

```
    Node(int e) {
```

```
        key = e;
```

```
        left = right = null;
```

```
    }
```

```
}
```

```
class Tree {
```

```
    Node root;
```

```
    Tree() {
```

```
        root = null;
```

```
    }
```

```
    public void insert(Node r, Node n) {
```

```
        if (root == null)
```

```
        {
```

```
            root = n;
```

```
        }
```

```
    } else
```

```
    {
```

```
        if (n.key < r.key)
```

```
        {
```

```
            if (r.left == null)
```

```

        {
            r.left = n;
        }
        else
        {
            inSert(r.left, n);
        }
    }
    else
    {
        if (r.right == null)
        {
            r.right = n;
        }
        else
        {
            inSert(r.right, n);
        }
    }
}
}

```

```

public void inorder(Node r) {
    if (r != null) {
        inorder(r.left);
        System.out.println(r.key);
        inorder(r.right);
    }
}

```

```

public void preorder(Node r) {
    if (r != null) {
        System.out.println(r.key);
        inorder(r.left);
        inorder(r.right);
    }
}

public void postorder(Node r) {
    if (r != null) {
        inorder(r.left);
        inorder(r.right);
        System.out.println(r.key);
    }
}

}

public class DSTree {
    public static void main(String args[]) {

        int ch;
        Tree t = new Tree();
        Scanner scanner = new Scanner(System.in);

        for(int i=0;i<=5;i++)
        {
            System.out.println("Insert Tree");

```

```

        int in = scanner.nextInt();

        Node n = new Node(in);

        t.inSert(t.root, n);

    }

    do {

        System.out.println(

            "\n1.Inorder \n2.Preorder \n3.Postorder \n Enter choice :");

        ch = scanner.nextInt();

        switch (ch) {

            case 1:

                System.out.println("Inorder");

                t.inorder(t.root);

                break;

            case 2:

                System.out.println("Preorder");

                t.preorder(t.root);

                break;

            case 3:

                System.out.println("Postorder");

                t.postorder(t.root);

                break;

        }

    } while (ch != 0);

}

```

}