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```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
typedef struct Node {  
    struct Node *left;  
    struct Node *right;  
    int data;  
} *node;
```

```
node getnode (int item) {  
    node temp = (node) malloc (sizeof (struct Node));  
    temp → left = NULL;  
    temp → data = item;  
    temp → right = NULL;  
    return temp;  
}
```

}

```
node insert (node root, int ele) {  
    if (root == NULL)  
        return getnode (ele);  
    else if (ele < root → data)  
        root → left = insert (root → left, ele);  
    else if (ele > root → data)  
        root → right = insert (root → right, ele);
```

```
    return root;
```

}

```
void inorder (node root) {  
    if (root == NULL)  
        return;  
    inorder (root → left);  
    printf ("%d", root → data);
```



```

3
void preorder (node root) {
    if (root == NULL)
        return;
    printf ("%d", root->data);
    preorder (root->left);
    preorder (root->right);
    printf ("%d", root->data);
}

```

```

void postorder (node root) {
    if (root == NULL)
        return;
    postorder (root->left);
    postorder (root->right);
    printf ("%d", root->data);
}

```

```

int main () {
    node root = NULL;
    int ch, cl = 1;
    while (ch != 5) {
        printf ("1. Insert 2. Preorder Display 3. Inorder Display 4. Postorder Display 5. Exit\n");
        scanf ("%d", &ch);
        printf ("\n");
        switch (ch) {
            case 1: printf ("Please insert element:");
                    scanf ("%d", &cl);
                    root = insert (root, cl);
                    break;
            case 2: preorder (root);
                    break;

```

case 3: ~~inorder~~ (root);

break;

case 4: postorder (root);

break;

case 5: printf (" exiting. ");

exit (1);

default : printf (" wrong input ! ");

}

}

}