**#include <stdio.h>**

**#include <stdlib.h>**

**struct Node**

**{**

**int data;**

**struct Node \*left;**

**struct Node \*right;**

**};**

**struct Node \*root=NULL;**

**void inorder(struct Node \*root)**

**{**

**if(root!=NULL)**

**{**

**inorder((\*root).left);**

**printf("%d ", (\*root).data);**

**inorder((\*root).right);**

**}**

**else**

**{**

**return;**

**}**

**}**

**void preorder(struct Node \*root)**

**{**

**if(root!=NULL)**

**{**

**printf("%d ", (\*root).data);**

**preorder((\*root).left);**

**preorder((\*root).right);**

**}**

**else**

**{**

**return;**

**}**

**}**

**void postorder(struct Node \*root)**

**{**

**if(root!=NULL)**

**{**

**postorder((\*root).left);**

**postorder((\*root).right);**

**printf("%d ", (\*root).data);**

**}**

**else**

**{**

**return;**

**}**

**}**

**void insert(int value)**

**{**

**struct Node \*temp=root;**

**struct Node \*new\_node=malloc(sizeof(struct Node));**

**while(temp!=NULL)**

**{**

**if(value<(\*temp).data)**

**{**

**if((\*temp).left==NULL)**

**{**

**(\*temp).left=new\_node;**

**break;**

**}**

**else**

**{**

**temp=(\*temp).left;**

**}**

**}**

**else**

**{**

**if((\*temp).right==NULL)**

**{**

**(\*temp).right=new\_node;**

**break;**

**}**

**else**

**{**

**temp=(\*temp).right;**

**}**

**}**

**}**

**(\*new\_node).data=value;**

**(\*new\_node).left=NULL;**

**(\*new\_node).right=NULL;**

**if(root==NULL)**

**{**

**root=new\_node;**

**}**

**}**

**void main()**

**{**

**while(1)**

**{**

**printf("Enter 1 to insert the elements into the tree, 2 to do preorder traversal, 3 to do inorder traversal, 4 to do postorder traversal and 5 to exit. ");**

**int choice;**

**scanf("%d", &choice);**

**if(choice==1)**

**{**

**printf("Enter the value to insert. ");**

**int value;**

**scanf("%d", &value);**

**insert(value);**

**}**

**else if(choice==2)**

**{**

**preorder(root);**

**}**

**else if(choice==3)**

**{**

**inorder(root);**

**}**

**else if(choice==4)**

**{**

**postorder(root);**

**}**

**else if(choice==5)**

**{**

**break;**

**}**

**else**

**{**

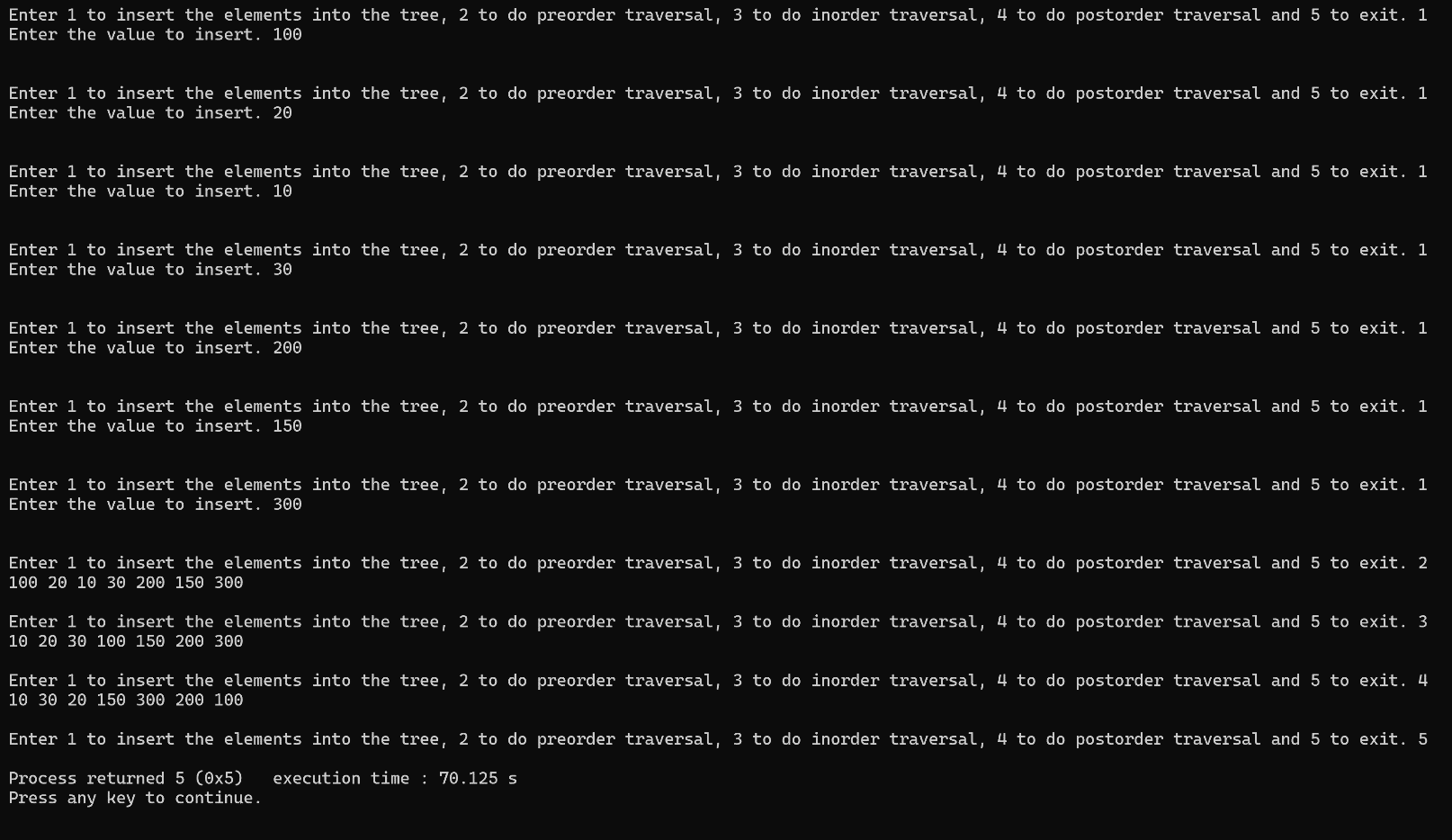
**printf("Invalid character.");**

**}**

**printf("\n\n");**

**}**

**}**

****