

#include<stdio.h>	
	#include<stdlib.h>
	struct node
	{
	int data;
	struct node* left;
	struct node* right;
	}*root1;
	struct node *create()
	{
	struct node *temp;
	printf("\n Enter data:");
	temp=(struct node*)malloc(sizeof(struct node));
	scanf("%d",&temp->data);
	temp->left=temp->right=NULL;
	return temp;
	}
	void insert(struct node *root,struct node *temp)
	{
	if(temp->data<root->data)

	{
	if(root->left!=NULL)
	insert(root->left,temp);
	else
	root->left=temp;
	}
	if(temp->data>root->data)
	{
	if(root->right!=NULL)
	insert(root->right,temp);
	else
	root->right=temp;
	}
	}
	void Postorder(struct node* node)
	{
	if (node == NULL)
	return;
	Postorder(node->left);

	Postorder(node->right);
	printf("%d ", node->data);
	}
	void Inorder(struct node* node)
	{
	if (node == NULL)
	return;
	Inorder(node->left);
	printf("%d ", node->data);
	Inorder(node->right);
	}
	void Preorder(struct node* node)
	{
	if (node == NULL)
	return;
	printf("%d ", node->data);
	Preorder(node->left);
	Preorder(node->right);
	}

	int main()
	{
	int ch;
	struct node *temp;
	do
	{
	printf("1.create\n2.insert\n3.preorder\n4.postorde r\n5.inorder\n6.Exit\n");
	scanf("%d",&ch);
	switch(ch)
	{
	case 1:
	root1=create();
	break;
	case 2:
	printf("enter the elem to be entered\n");
	temp=(struct node*)malloc(sizeof(struct node));
	scanf("%d",&temp->data);
	insert(root1,temp);
	break;
	case 3:
	Preorder(root1);
	printf("\n");
	break;
	case 4:
	Postorder(root1);
	printf("\n");
	break;
	case 5:
	Inorder(root1);
	printf("\n");
	break;
	case 6:
	break;
	default:
	printf("wrong entry");

	}
	}while(ch!=6);
	}

```
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
1
Enter data:12
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
2
enter the elem to be entered
13
1.create
2.insert
3.preorder
4.postorder
5.inorder
```

```
2
enter the elem to be entered
14
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
2
enter the elem to be entered
2
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
2
enter the elem to be entered
4
```

```
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
3
12 2 4 13 14
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
4
4 2 14 13 12
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
5
```

```
5.inorder
6.Exit
4
4 2 14 13 12
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
5
2 4 12 13 14
1.create
2.insert
3.preorder
4.postorder
5.inorder
6.Exit
6
```