1. Write a program to traversal preorder, inorder, postorder of a binary tree using link inversion.

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

struct node {
    int element;
    struct node* left;
    struct node* right;
};

struct node* createNode(int val)
{
    struct node* Node = (struct node*)malloc(sizeof(struct node));
    Node->element = val;
    Node->left = NULL;
    Node->right = NULL;

    return (Node);
}

void traversePreorder(struct node* root)
{
    if (root == NULL)
        return;
    printf(" %d ", root->element);
    traversePreorder(root->left);
    traversePreorder(root->right);
}

void traverseInorder(struct node* root)
{
    if (root == NULL)
        return;
    traverseInorder(root->left);
    printf(" %d ", root->element);
    traverseInorder(root->right);
}


void traversePostorder(struct node* root)
{
    if (root == NULL)
        return;
    traversePostorder(root->left);
    traversePostorder(root->right);
    printf(" %d ", root->element);
}


int main()
{
    struct node* root = createNode(36);
    root->left = createNode(26);
```

```
    root->right = createNode(46);
    root->left->left = createNode(21);
    root->left->right = createNode(31);
    root->left->left->left = createNode(11);
    root->left->left->right = createNode(24);
    root->right->left = createNode(41);
    root->right->right = createNode(56);
    root->right->right->left = createNode(51);
    root->right->right->right = createNode(66);

    printf("\n The Preorder traversal of given binary tree is -\n");
    traversePreorder(root);

    printf("\n The Inorder traversal of given binary tree is -\n");
    traverseInorder(root);

    printf("\n The Postorder traversal of given binary tree is -\n");
    traversePostorder(root);

    return 0;
}
```

Output

```
The Preorder traversal of given binary tree is -
36  26  21  11  24  31  46  41  56  51  66
The Inorder traversal of given binary tree is -
11  21  24  26  31  36  41  46  51  56  66
The Postorder traversal of given binary tree is -
11  24  21  31  26  41  51  66  56  46  36
```