

**Name: R.RACHITHA 192421058)**

**Course Name: DATA STRUCTURES FOR MODERN COMPUTING SYSTEMS**

**Course Code: CSA0302**

**Q : WRITE A C PROGRAM TO PERFORM BINARY TREE USING LINKED LIST.**

**C PROGRAMMING CODE:**

**#include <stdio.h>**

**#include <stdlib.h>**

**Struct Node {**

**int data;**

**struct Node\* left;**

**struct Node\* right;**

**};**

**struct Node\* createNode(int data) {**

**struct Node\* newNode = (struct Node\*)malloc(sizeof(struct Node));**

**newNode->data = data;**

**newNode->left = newNode->right = NULL;**

**return newNode;**

**}**

**void display(struct Node\* root) {**

**if(root != NULL) {**

**printf("%d ", root->data);**

**display(root->left);**

**display(root->right);**

**}**

**}**

**int main() {**

**struct Node\* root = createNode(50);**

**root->left = createNode(30);**

**root->right = createNode(70);**

**root->left->left = createNode(20);**

**root->left->right = createNode(40);**

**printf("Binary Tree (Linked List): ");**

**display(root);**

**return 0;**

**}**

**OUTPUT:**

