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**Code:**

#include <iostream>

#include <string.h>

using namespace std;

struct node {

    string label;

    intch\_count;

    struct node \*child[10];

} \* root;

class GT {

public:

    void create\_tree();

    void display(node \*r1);

    GT() {

        root = NULL;

    }

};

void GT::create\_tree() {

    inttchapters, i, j;

    root = new node;

    cout<< "Enter name of book: ";

    cin.get();

    getline(cin, root->label);

    cout<< "Enter number of chapters in book: ";

    cin>>tchapters;

    root->ch\_count = tchapters;

    for (i = 0; i<tchapters; i++) {

        root->child[i] = new node;

        cout<< "Enter the name of Chapter " <<i + 1 << ": ";

        cin.get();

        getline(cin, root->child[i]->label);

        cout<< "Enter number of sections in Chapter " << root->child[i]->label << ": ";

        cin>> root->child[i]->ch\_count;

        for (j = 0; j < root->child[i]->ch\_count; j++) {

            root->child[i]->child[j] = new node;

            cout<< "Enter Name of Section " << j + 1 << ": ";

            cin.get();

            getline(cin, root->child[i]->child[j]->label);

        }

    }

}

void GT::display(node \*r1) {

    inti, j, tchapters;

    if (r1 != NULL) {

        cout<< "\n-----Book Hierarchy-----";

        cout<< "\nBook title: " << r1->label;

        tchapters = r1->ch\_count;

        for (i = 0; i<tchapters; i++) {

            cout<< "\nChapter " <<i + 1 << ": " << r1->child[i]->label;

            cout<< "\nSections:";

            for (j = 0; j < r1->child[i]->ch\_count; j++) {

                cout<< "\n" << r1->child[i]->child[j]->label;

            }

        }

    }

    cout<<endl;

}

intmain() {

    int choice;

    GT gt;

    while (1) {

        cout<< "-----------------" <<endl;

        cout<< "Book Tree Creation" <<endl;

        cout<< "-----------------" <<endl;

        cout<< "1. Create" <<endl;

        cout<< "2. Display" <<endl;

        cout<< "3. Quit" <<endl;

        cout<< "Enter your choice: ";

        cin>> choice;

        switch (choice) {

            case 1:

                gt.create\_tree();

                break;

            case 2:

                gt.display(root);

                break;

            case 3:

                exit(0);

            default:

                cout<< "Wrong choice!" <<endl;

        }

    }

    return 0;

}

**Output :**

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Book Tree Creation

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1. Create

2. Display

3. Quit

Enter your choice: 1

Enter name of book: DSA

Enter number of chapters in book: 1

Enter the name of Chapter 1: Hashing

Enter number of sections in Chapter Hashing: 1

Enter Name of Section 1: Linear probing

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Book Tree Creation

-----------------

1. Create

2. Display

3. Quit

Enter your choice: 2

-----Book Hierarchy-----

Book title: DSA

Chapter 1: Hashing

Sections:

Linear probing

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Book Tree Creation

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1. Create

2. Display

3. Quit

Enter your choice: 3