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    # include <iostream>
    # include <cstdlib>
    # include <string.h>
    using namespace std;
    struct dt_node
    {

    char caption[ 10];
    int chapters;
    struct dt_node *cnode[10];
    }*root;
    class BOOK
    {

    public:
    void create_tree();
    void display(dt_node *r1);
    BOOK()
    {
    root = NULL;
    }
    };
    void BOOK::create_tree()
    {

    int chp_cnt,i,j,k;
    root = new dt_node();
    cout<<"Enter name of book :";
    cin>>root->caption;
    cout<<"Enter no. of chapters in book :";
    cin>>chp_cnt;
    root->chapters = chp_cnt;
    for(i=0;i<chp_cnt;i++)
    {
        root->cnode[i] = new dt_node;
        cout<<"Enter Chapter name\n ";
        cin>>root->cnode[i]->caption;
        cout<<"Enter no. of sections in Chapter: "<<root->cnode[i]->caption;
        cin>>root->cnode[i]->chapters;
        for(j=0;j<root->cnode[i]->chapters;j++)
        {
            root->cnode[i]->cnode[j] = new dt_node;
            cout<<"\nEnter Section "<<j+1<<"'name\n ";
            cin>>root->cnode[i]->cnode[j]->caption;

        }
    }
    }
    void BOOK::display(dt_node *r1)
    {
    int i,j,k,chp_cnt;
    if(r1 != NULL)
    cout<<"\n-----Book Hierarchy--";
    cout<<"\n Book title: "<<r1->caption;
    chp_cnt =r1->chapters;

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for(i=0;i<chp_cnt;i++)
{
cout<<"\n Chapter: "<<i+1;
cout<<" "<<rl->cnode[i]->caption;
cout<<"\n Sections: ";
for(j=0;j<rl->cnode[i]->chapters;j++)
{

cout<<" "<<rl->cnode[i]->cnode[j]->caption;
}
}
}
int main()
{

int choice;
BOOK BOOK;

while (1)
{

cout<<"\nBook Tree Creation "<<endl;

cout<<"1.Create"<<endl;
cout<<"2.Display"<<endl;
cout<<"3.Quit"<<endl;
cout<<"Enter your choice :";
cin>>choice;
switch(choice)
{
    case 1:
BOOK.create_tree();
    case 2:
BOOK.display(root);
break;
    case 3:
exit(1);
default:
cout<<"Wrong";
}
}
}

```