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#include<iostream>
#include<stdlib.h>
using namespace std;
struct node
{
char label[60];
int chcount;
node *child[50];
}*root;
class general
{
public:
void insert();
void display();
general()
{
root == NULL;
}
};
void general::insert()
{
```

```
int secount;
root = new node();
cout<<"Enter the name of book:"<<endl;
cin>>root->label;
cout<<"Enter the total number of chapters in book:"<<endl;
cin>>root->chcount;
for(int i=0;i<root->chcount;i++)
{
root->child[i] = new node();
cout<<"Enter the name of chapters:"<<endl;
cin>>root->child[i]->label;
cout<<"Enter the number of sections:"<<endl;
cin>>root->child[i]->chcount;
for(int j=0;j<root->child[i]->chcount;j++)
{
root->child[i]->child[j] = new node();
cout<<"Enter the name of section:"<<endl;
cin>>root->child[i]->child[j]->label;
cout<<"Enter the number of sub sections:"<<endl;
cin>>root->child[i]->child[j]->chcount;
for(int k=0; k<root->child[i]->child[j]->chcount; k++)
{
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root->child[i]->child[j]->child[k] = new node();
cout<<"Enter the name of sub section:"<<endl;
cin>>root->child[i]->child[j]->child[k]->label;
}
}
}
}

void general::display()
{
if(root != NULL)
{
cout<<"***** Hierarchy of Book *****"<<endl;
cout<<"Book Name is: "<<root->label<<endl;
for(int i=0; i<root->chcount; i++)
{
cout<<"_"<<root->child[i]->label<<endl;
for(int j=0; j<root->child[i]->chcount; j++)
{
cout<<"__"<<root->child[i]->child[j]->label<<endl;
for(int k=0; k<root->child[i]->child[j]->chcount; k++)
{
cout<<"_____"<<root->child[i]->child[j]->child[k]->label<<endl;

```

```

}
}
}
}
}
int main()
{
    general g;
    int ch;
    do
    {
        cout<<"~~~~~ MENU ~~~~"<<endl;
        cout<<"1. Insert."<<endl;
        cout<<"2. Display."<<endl;
        cout<<"Enter the choice:"<<endl;
        cin>>ch;
        switch(ch)
        {
            case 1: g.insert();
            break;
            case 2: g.display();
            break;

```

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}
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}while(ch<3);
```

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}
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