

Assignment 03:

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Problem Statement :

Imagine a publishing company which does a marketing for book and audio cassette versions. Create a class publication that stores the title (a string) and price (type float) of publications. From this class derive two classes: Book which adds a page count (type int) and tape which adds playing time in minutes (type float). Write a program that instantiates the book and tape class, allows user to enter data and displays the data members. If an exception is caught, replace all the data member values with zero values.

Source Code :

```
#include <iostream>
#include <string>
using namespace std;

class Publication
{
public:
    string title;
    float price;

    void accept()
    {
        cout << "Enter the title : " << endl;
        cin >> title;
        cout << "Enter the price : " << endl;
        cin >> price;
    }
}
```

```

    void show()
    {
        cout << "Title : " << title << endl;
        cout << "Price : " << price << endl;
    }
};

class Book : public Publication
{
public:
    int page_count;

    void accept()
    {
        Publication::accept();
        cout << "Enter the number of pages : " << endl;
        cin >> page_count;
    }

    void show()
    {
        Publication::show();
        cout << "Page Count : " << page_count << endl;
    }
};

class Tape : public Publication
{
public:
    float play_time;

    void accept()
    {
        Publication::accept();
        cout << "Enter the playing time in minutes : " << endl;
        cin >> play_time;
    }

    void show()
    {
        Publication::show();
        cout << "Play Time : " << play_time << endl;
    }
};

```

```

int main()
{
    Book obj;
    cout << "\nBook Class Details : " << endl;
    obj.accept();
    cout << "-----" << endl;
    obj.show();
    cout << "-----" << endl;

    cout << "\nTape Class Deatils : " << endl;
    Tape obj2;
    obj2.accept();
    cout << "-----" << endl;
    obj2.show();
    cout << "-----" << endl;

    return 0;
}

```

/*

OUTPUT :

Book Class Details :

Enter the title :

OOP

Enter the price :

219

Enter the number of pages :

455

Title : OOP

Price : 219

Page Count : 455

Tape Class Deatils :

Enter the title :

C++

Enter the price :

277

Enter the playing time in minutes :

2.32

Title : C++

Price : 277

Play Time : 2.32

*/