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**ASSIGNMENT**

**Assignment no -01**

Course NO

Course Name

Submission Date

:CSE 122

:

Object Oriented Programming language Lab

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**Submitted To**

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**SECTION:06**

CO Question

CO2 . Imagine a publishing company that markets both book and audiocassette

versions of its works. Create a class publication that stores the title (a

string) and price (type float) of a publication. From this class derive two

classes: book, which adds a page count (type int), and tape, which adds a

playing time in minutes (type float). Each of these three classes should

have a getData() function to get its data from the user at the keyboard, and

a putData() function to display its data.

Write a main program to test the book and tape classes by creating

instances of them, asking the user to fill in data with getData(), and then

displaying the data with putData().

SOLUTIONS:

#include<iostream>

#include<string>

using namespace std;

class publication

{

protected:

string title;

float price;

public:

publication()

{

title=" ";

price=0.0;

}

publication(string t,float p)

{

title=t;

price=p;

}

public:

void getdata()

{

cout<<"Enter title of publication: ";

cin>>title;

cout<<"Enter price of publication: ";

cin>>price;

}

void putdata(void)

{

cout<<"Publication titles :"<<title<<endl;

cout<<"Publication price :"<<price<<endl;

}

};

class book : public publication

{

int pagecount;

public:

book()

{

pagecount=0;

}

//After : base class constructor is called

book(string t,float p,int pc):publication(t,p)

{

pagecount=pc;

}

void getdata(void)

{

publication::getdata();//call publication class function to get getdata

cout <<"Enter Book Page Count :"; //Acquire book data from user

cin>> pagecount;

}

void putdata(void)

{

publication::putdata(); //Show Publication data

cout<< "Book page count:"<<pagecount <<endl; // Show book data

}

};

class CD: public publication

{

float time1;

public:

CD()

{

time1=0.0;

}

//After : base class constructor is called

CD(string t, float p, float tim):publication(t,p)

{

time1=tim;

}

void getdata(void)

{

publication::getdata();

cout <<"Enter tape's playing time:";

cin>> time1;

}

void putdata(void)

{

publication::putdata();

cout<<" Tape's playing time :"<< time1<<endl;

}

};

int main()

{

cout<<endl<<"Book data"<<endl;

book b("C++",230,300);

b.putdata();

cout<<endl<<"CD Data"<<endl;

CD c("C++",100,120.5);

c.putdata();

cout<<"\n Enter New Details Of Book :\n";

b.getdata();

c.getdata();

cout<<"\n\n Book data entered by user:\n";

b.putdata();

c.putdata();

return 0;

}