**OOPS** EXP3:

#include<iostream>

#include<stdio.h>

using namespace std;

class  publication

{

private:

    string title;

    float price;

public:

    void add()

    {

        cout<<"enter the publication information"<<endl;

        cout<<"enter title of the publication : ";

        cin.ignore();

        getline(cin, title);

        cout<<"enter the price of the publication ";

        cin>>price;

    }

    void display(){

        cout<<"\n\n\ntitle of publication :"<<title;

        cout<<"\n\nPublication Price :"<<price;

    }

};

class book: public publication

{

    private:int page\_count;

    public: void add\_book(){

        try{

        add();

        cout<<"enter the page count of book";

        cin>>page\_count;

        if(page\_count<=0){

            throw page\_count;

        }

    }

    catch(...){

        cout<<"\n Invalid Page count!!!";

        page\_count=0;

    }

}

void display\_book(){

    display();

    cout<<"\npage count :"<<page\_count;

    cout<<"\n----------------------------------------------\n";

}

};

class tape: public publication

{

    private: float play\_time;

    public: void add\_tape(){

        try{

            add();

            cout<<"enter play duration of the tape";

            cin>>play\_time;

            if (play\_time<=0)

                throw play\_time;

            } catch (...) {

                cout<<"\n\n invalid playtime";

                play\_time=0;

            }

        }

    void display\_tape(){

        display();

        cout<<"\n {Play time: "<<play\_time<<" min";

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

    }

};

int main()

{

    book b1[10];

    tape t1[10];

    int ch, b\_count=0, t\_count=0;

    do{

        cout<<"\n Publication database system";

        cout<<"\n Menu";

        cout<<"\n 1. Add info of books";

        cout<<"\n 2. Add info of tapes";

        cout<<"\n 3. Display books info";

        cout<<"\n 4. Display tapes info ";

        cout<<"\n 5. Exit";

        cout<<"\n\n Enter your choice: ";

        cin>>ch;

        switch (ch){

            case 1:

                b1[b\_count].add\_book();

                b\_count++;

                break;

            case 2:

                t1[t\_count].add\_tape();

                t\_count++;

                break;

            case 3:

                cout<<"\n\n BOOK PUBLICATION DATABASE SYSTEM";

                for(int j=0; j<b\_count; j++){

                    b1[j].display\_book();

                }

                break;

            case 4:

            cout<<"\n\n Tape Publication database system ";

            for (int j=0; j<t\_count; j++)

            {

                t1[j].display\_tape();

            }

            break;

            case 5:

                exit(0);

            }

    }while (ch !=5);

    return 0;

}

OUTPUT:

­ Publication database system

Menu

1. Add info of books

2. Add info of tapes

3. Display books info

4. Display tapes info

5. Exit

Enter your choice: 1

enter the publication information

enter title of the publication : Nirali

enter the price of the publication 300

enter the page count of book250

Publication database system

Menu

1. Add info of books

2. Add info of tapes

3. Display books info

4. Display tapes info

5. Exit

Enter your choice: 2

enter the publication information

enter title of the publication : DPU

enter the price of the publication 400

enter play duration of the tape20

Publication database system

Menu

1. Add info of books

2. Add info of tapes

3. Display books info

4. Display tapes info

5. Exit

Enter your choice: 3

BOOK PUBLICATION DATABASE SYSTEM

title of publication :Nirali

Publication Price :300

page count :250

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

Publication database system

Menu

1. Add info of books

2. Add info of tapes

3. Display books info

4. Display tapes info

5. Exit

Enter your choice: 4

Tape Publication database system

title of publication :DPU

Publication Price :400

Play time: 20 min

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

Publication database system

Menu

1. Add info of books

2. Add info of tapes

3. Display books info

4. Display tapes info

5. Exit