

```

#include<iostream>

#include<stdio.h>

using namespace std;

class publication
{
    private:
        string title;
        float price;
    public:
        void add()
        {
            cout << "\nEnter the Publication information : " << endl;
            cout << "Enter Title of the Publication : ";
            cin.ignore();
            getline(cin, title);
            cout << "Enter Price of Publication : ";
            cin >> price;
        }
        void display()
        {
            cout << "\n-----";
            cout << "\nTitle of Publication : " << title;
            cout << "\nPublication Price : " << price;
        }
};

class book : public publication
{
    private:
        int page_count;
    public:
        void add_book()

```

```

        {
            try
            {
                add();
                cout << "Enter Page Count of Book : ";
                cin >> page_count;
                if (page_count <= 0)
                {
                    throw page_count;
                }
            }
            catch(...)
            {
                cout << "\nInvalid Page Count!!!";
                page_count = 0;
            }
        }
        void display_book()
        {
            display();
            cout << "\nPage Count : " <<
            page_count;
            cout << "\n-----\n";
        }
    };

    class tape : public publication    // declaring class tape which inherits class publication in public
mode
    {
        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 << "\nInvalid Play Time!!!";
        play_time = 0;
    }
}

void display_tape()
{
    display();
    cout << "\nPlay Time : " <<
    play_time << " min";
    cout << "\n-----\n";
}
};

```

```

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 << "\n1. Add Information to Books";
cout << "\n2. Add Information to Tapes";
cout << "\n3. Display Books Information";
cout << "\n4. Display Tapes Information";
cout << "\n5. Exit";
cout << "\n\nEnter 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* * * * BOOK PUBLICATION DATABASE SYSTEM * * * * ";
for (int j=0;j < b_count;j++)
{
b1[j].display_book();
}
break;
case 4:
cout << "\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 Information to Books
2. Add Information to Tapes
3. Display Books Information
4. Display Tapes Information
5. Exit

Enter your choice : 1

Enter the Publication information :

Enter Title of the Publication : nirali

Enter Price of Publication : 200

Enter Page Count of Book : 400

* * * * * PUBLICATION DATABASE SYSTEM * * * * *

-----MENU-----

1. Add Information to Books
2. Add Information to Tapes
3. Display Books Information
4. Display Tapes Information
5. Exit

Enter your choice : 2

Enter the Publication information :

Enter Title of the Publication : nirali

Enter Price of Publication : 200

Enter Play Duration of the Tape : 34

* * * * * PUBLICATION DATABASE SYSTEM * * * * *

-----MENU-----

1. Add Information to Books
2. Add Information to Tapes
3. Display Books Information
4. Display Tapes Information
5. Exit

Enter your choice : 3

* * * * * BOOK PUBLICATION DATABASE SYSTEM * * * * *

Title of Publication : nirali

Publication Price : 200

Page Count : 400

* * * * * PUBLICATION DATABASE SYSTEM * * * * *

-----MENU-----

1. Add Information to Books
2. Add Information to Tapes
3. Display Books Information
4. Display Tapes Information
5. Exit

Enter your choice : 4

* * * * * TAPE PUBLICATION DATABASE SYSTEM * * * * *

Title of Publication : nirali

Publication Price : 200

Play Time : 34 min

* * * * * PUBLICATION DATABASE SYSTEM * * * * *

-----MENU-----

1. Add Information to Books
2. Add Information to Tapes
3. Display Books Information
4. Display Tapes Information
5. Exit

Enter your choice : 5