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```cpp
# 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_____";
```

```cpp
                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;
```

```cpp
                    }

            }

            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;
```

```cpp
                }
            }
            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_____ ";
```

```cpp
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 : xyz
Enter Price of Publication : 500
Enter Page Count of Book : 200

* * * * * 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 : xyz
Enter Price of Publication : 500
Enter Play Duration of the Tape : 20

* * * * * 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 : xyz
Publication Price : 500
Page Count : 200
------------------------------------------------

* * * * * PUBLICATION DATABASE SYSTEM * * * * *
                  MENU
```

```
Enter your choice : 3

* * * * BOOK PUBLICATION DATABASE SYSTEM * * * *
---------------------------------------------------
Title of Publication : xyz
Publication Price : 500
Page Count : 200
---------------------------------------------------

* * * * * 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


----------------------------------
Process exited after 101.5 seconds with return value
Press any key to continue . . .
```