

```

#include<iostream>

#include<stdio.h>

using namespace std;

class publication          // declaring 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 // declaring class book which inherits class publication in public
mode.
{
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];    // object of class book
tape t1[10];    // object of class tape
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++)
{

```

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t1[j].display_tape();
}
break;
case 5:
exit(0);
}
}while (ch != 5);
return 0;
}

```

OUTPUT:-

```

Output
/tmp/Az2MtN7wyj.o
MOHINI KATE
SE AIDS          ROLL NO.- 18

* * * * * 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 : 677
Enter Page Count of Book : 500
* * * * * 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 : NCERT
Enter Price of Publication : 200
Enter Play Duration of the Tape : 300
* * * * * 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 : 677
Page Count : 500
-----
* * * * * 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 : NCERT
Publication Price : 200
Play Time : 300 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
```