**DESCRIPTION**

The goal is to create a library called DisneyPlus, which hosts Movies and Books, and then to be able to view information such as the best movie (based on score), the most expensive book, all the movies in which an actor has acted. The classes you need to define are Consumer, User, Category, Asset, Book, Movie, DisneyPlus. Apart from these, you do not need to define any classes. You can use any built-in method or structure that you think will work for you.

**QUESTION**

**Define a class named Consumer.**

**id:int**

**birthYear:int,**

**salary:int,**

**firstName:string,**

**lastName:string,**

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**Define a class named User and inherite it from the Consumer class.**

**loginStatus:boolean; //if user signed in set true. Default value is false**

**userName:string;**

**password:string;**

**User(id,firstName,LastName,userName,password);**

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**Define a class named Category.**

**id:int,**

**categoryCode:string;**

**categoryName:string;**

**Category(id,code,name);**

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**Define a abstract class named Asset.**

**id:int**

**name:string**

**scores: contains multiple int values**

**release\_year: int**

**category: Category**

**price: int**

**type:string; //"movie" or "book";**

**Asset(id,name,scores, release\_year,price,category,type);**

**void addScore(score:int); // add a new score to scores**

**double getMaxScore(); // getting max score of this Asset object**

**double getMinScore(); // getting min score of this Asset object**

**double getAvgScore(); //getting avarage score of this Asset object**

**showDetail();**

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***Define a class named Book and inherite it from the Asset class.***

**writer : Consumer**

**numberOfPages : int**

**Book(id,name,scores, release\_year,price,category,type,writer,numberOfPages);**

**setWriter(newWriter:Consumer);**

**.... and the other methods which coming from Asset class.**

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***CLASS6-Define a class named Movie and inherite it from the Asset class..***

**actors: ArrayList**

**director: Consumer**

**Movie(id,name,scores, release\_year,price,category,type,actors, director);**

**boolean deleteActor(consumerId:int); // if you can delete return true otherwise return false**

**void addActor(actor: Consumer);**

**override showDetail();**

**...** **and the other methods which coming from Asset class.**

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***CLASS7-Define a class named DisneyPlus***

**assets: ArrayList //(it must be able to contain multiple Asset objects.)**

**credential: User; //initially set null**

**isLogin:boolean //initial value must be false and you don't need to get this value from the user.**

**DisneyPlus(assets);**

**login(user:User) //(For Example: userName:testUser password:123456);**

**//user must be logged in to add anything otherwise show a warning message by using below 3 methods. You must check “LoginStatus” of user**

**Void addMovie(m1:Movie);**

**Bool removeMovie(movieId:int);**

**Void addBook(b1:Book); .**

**bool removeBook(bookId:int);**

**Void addAsset(m2:Asset);**

**(Create 4 Methods. You do not need to do any login checks for the following steps for DisneyPlus. )**

**N1- Create the function that displays the information of the OLDEST actors.**

**N2-Create the function that displays the information of the movie with the lowest average score on the screen.**

**N3-Create a function that takes a "movie\_id" as a parameter and displays information of highest paid actor in that movie.**

**N4-Create a function that takes a "category id" as a parameter and displays information on the most cheapest Asset in that category of DisneyPlus.**

**N5-Create a function that takes a Consumer's id as a parameter and displays the information of all movies acted by him/her on the screen.**

**N6- Create the function that displays the information of the object with the highest average score among all Assets..**

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***In Main Method:***

**1-Create multiple Consumer objects. You will use them when defining objects such as Movie, Book.**

**2-Create multiple Category objects. You will use them when defining objects such as Movie, Book.**

**3-Create multiple Movie objects and add some scores to them.**

**4-Find the max, min scores for these movies.**

**5-Create multiple Book objects and add some scores to them.**

**6-Print out the avarage score of specific book by using getAvarageScore method.**

**7-Create a User object.**

**8-Create a DisneyPlus object.**

**9-Login for DisneyPlus object.**

**10-Add the objects you created in steps 3 and 5 to the DisneyPlus object.**

**11-Finally, runnig the N1-N2-N3-N4-N5-N6 functions mentioned in the DisneyPlus section, then ensure that their outputs are displayed separately.**