

We are writing a media library class that maintains a library made up of **Media** objects.

MusicMedia extends **Media** and has these properties:

```
String label
String asin
String releaseDate
String title
String artist
```

All properties should be accessible externally as read-only properties

there is also a `String getFormat` method which all classes which extend the class **MUST** override

Fill in the **MusicMedia** class

MovieMedia extends **Media** and has these properties:

```
String studio
String asin
String mpaaRating
String director
String releaseDate
String title
```

All properties should be accessible externally as read-only properties

there is also a `String getFormat` method which all classes which extend the class **MUST** override

Fill in the **MovieMedia** class

A **CD** is a specific type of **MusicMedia**

It has one extra property: `Integer numberOfDiscs` which should be exposed as read-only
It should return a format of "CD"

Fill in the **CD** class

The **DVD** class is a specific type of **MovieMedia**

It has one extra property: **Integer numberOfDiscs** which should be exposed as read-only
It should return a format of "DVD"

Fill in the **DVD** class

The **DigitalMusic** class is a specific type of **MusicMedia**

It has one extra property: **String purchaseModel**
It should return a format of "Digital Music"

Fill in the **DigitalMusic** class

The **DigitalMovie** class is a specific type of **MovieMedia**

It has one extra property: **String purchaseModel**
It should return a format of "Digital Movie"

Fill in the **DigitalMovie** class

All of the specific media types should be **Catalogable**

Catalogable means they have a **String getCatalogString** method which returns a String listing all of its properties

Make all media items **Catalogable** (do this in all specific media types, not in the more general classes)

DigitalMusic and **DigitalMedia** are both also **Streamable**

Streamable means they have a **String getPurchaseModel** method

The **MediaLibrary** class maintains a list of Media items and has methods that return the number of items in the library as well as the number of items of a specified format.

Write tests for the **MediaLibrary** methods

If you have time, write tests for the **CD**, **DigitalMusic**, **DVD**, and **DigitalMovie** classes