

The class `Movie` is started below. An instance of class `Movie` represents a film. This class has the following three class variables:

- `title`, which is a `String` representing the title of the movie
- `releaseYear`, which is an `int` representing the year in which the movie was released
- `rating`, which is a `double` representing a rating of the movie (just assume it's from IMDB)

Create a class first.

After that, add the following to your class:

- a) Write a constructor for the class `Movie`, which takes a `String` representing the title of the movie, an `int` representing the year the movie was released, and a `double` representing the rating as its arguments, and sets the respective class variables to these values.
- b) Write a second constructor for the class `Movie`, which takes a `String` representing the title of the movie and an `int` representing the release year, and sets the respective class variables to these values, while the class variable `rating` is set to 0.
- c) Create a variable that will count the number of movies that were created using the `Movie` class. Ensure that the variable is update properly (i.e., they are in the constructor with the appropriate operation).

Now, to test it out:

1. Write a main method within your class to where you will create an instance of the class `Movie` with the title "Everything Everywhere All at Once", the release year 2022, and the rating 8.9.
2. Create another instance of the class `Movie` with the title "Doctor Strange in the Multiverse of Madness" and the release year 2022.
3. Print out the variable that counts the movie instances you have created. It should print out 2 (since you created two movie instances).

Challenge problem (Optional):

- a) Write a method within the class called `getMoviesAboveRating`, which takes an array of base type `Movie` and a rating number (e.g., 7.5) as its argument, and returns a new array of only those movies in the input array with a rating greater than or equal to what has been passed. You may assume the input array is full of `Movie` instances. The returned array need not be full.

Note: this challenge problem is to show you that you can have objects in your arrays (think about array of `String`). We will discuss this more next week but just try to see if you can draw parallel from a `String` of array (`String[] arr`) to an array of `Movie` objects.