CprE 339 – Homework 2

**Customer**

I began by refactoring the Customer class. I removed the statement method from this class and added a variable for keeping track of frequent renter points. I also removed the variable \_rentals. This functionality has been moved to the Rental class. All calculations relating to frequent renter points will be in the Customer class.

**Rental**

I chose to repurpose the Rental class. It now holds the Movies being rented at checkout. This makes more sense as we only process the movies in the current rental and not in the previous ones. The Movies are contained in an ArrayList because ArrayLists allow me to access the Movies by index.

**Movie**

Movie is now an abstract class with subclasses for each category. Each movie has a title which is handled by the Movie class itself. The subclasses have a function that returns the price of the rental based on the number of days it has been rented for (a property of Movie). If I need to add more forms of media to the store’s inventory, I can rename Movie to Media and create more forms of media that extend Media.

**New Classes**

The classes that I added are named NewMovie, KidsMovie, and RegMovie. They correspond to the categories in the original Movie class. They extend Movie and each contain a function called getPrice() that returns the price of the movie rental.

**RentalTest**

RentalTest contains the main() function to test the code that I refactored. That is its sole purpose.