Practical session 7

This work should be completed before the next lecture.

Task 1: Parameterised `DVD` supplier

Create a new NetBeans project.

Copy into the new project your `DVD` class from Task 1 of Week 5.

Following the concepts illustrated in the `IntegerArraySupplier` class, write a class that is a parameterised `Supplier` for your `DVD` class. You must include a constructor method that takes the title, lead actor and number of stars for the DVD to be created.

In the application class, create a `Supplier` that uses the DVD `Supplier` to create an `ArrayList` of 10 DVD objects.

In the `main()` method of the application class:

- create an `ArrayList` of 10 DVD objects
- use a `Consumer` to print the contents of the `ArrayList`

Portfolio requirements:
- The NetBeans project for this completed task

Task 2: Parameterised `Predicate`

Copy your NetBeans project from Task 1.

Following the concepts illustrated in the `IntegerArraySupplier` class, add a class that is a parameterised `Predicate` that returns `true` if the DVD title starts with a letter in the range, `c1` (inclusive) to `c2` (exclusive), given to the constructor

Modify the `main()` method of the application class as follows:

- Use your `Predicate` class to print the details of the DVD objects whose title starts with a letter in the range A to D
- Use your `Predicate` class to print the details of the DVD objects whose title starts with a letter in the range P to W

Portfolio requirements:
- The NetBeans project for this completed task

Task 3: Use a `Function`

Copy your NetBeans project from Task 2.

In the `main()` method of the application class:

- Write a `Function` that uses your `Predicate` class to return the number of DVD objects whose title starts with a letter in the range A to D; output that number
- Write a `Function` that uses your `Predicate` class to return the number of DVD objects whose title starts with a letter in the range P to W; output that number

Portfolio requirements:
- The NetBeans project for this completed task