Name: Nguyễn Đức Mạnh

Student ID: 20235525

1. **Use-case diagram and class diagram:**

**A diagram of a computer

Description automatically generated**

**A diagram of a project

Description automatically generated**

1. **Working with method overloading:**

* New code:

**A computer screen shot of a program code

Description automatically generated**

* Try to add a method ***addDigitalVideoDisc*** which allows to pass an arbitrary number of arguments for dvd. Compare to an array parameter. What do you prefer in this case?

I would prefer array parameter when I can determine a certain amount of DVD, and I use another way when the number of DVD is unknown.

1. **Passing parameter:**

* True swap method:

**A screen shot of a computer program

Description automatically generated**

* Is JAVA a Pass by Value or a Pass by Reference programming language?

JAVA is a pass-by-value programming language. The dvd1 and dvd2 in the method are copies of the reference to the original dvd1 and dvd2.

* After the call of **swap(jungleDVD, cinderellaDVD)** why does the title of these two objects still remain?

The dvd1 and dvd2 in the method are copies of the reference to the original dvd1 and dvd2, therefore the method only swap the copies, not the original object.

* After the call of **changeTitle(jungleDVD, cinderellaDVD.getTitle())** why is the title of the JungleDVD changed?

The method changeTitle take the address and modify the title at that address, therefore it also change the original dvd.

1. **Debug screenshot:**

**A screen shot of a computer

Description automatically generated**

**A screen shot of a computer

Description automatically generated**

**A screen shot of a computer

Description automatically generated**

**A screen shot of a computer

Description automatically generated**

**A screenshot of a computer program

Description automatically generated**

**A screenshot of a computer program

Description automatically generated**

**A screen shot of a computer

Description automatically generated**

**A screenshot of a computer program

Description automatically generated**

**A screenshot of a computer program

Description automatically generated**

1. **Classifier Member and Instance Member:**

**A screen shot of a computer code

Description automatically generated**

**A screen shot of a computer program

Description automatically generated**

**A black screen with blue and white text

Description automatically generated**

1. **Open the Cart class:**

* Write a **toString()** method for the **DigitalVideoDisc** class. What should be the return type of this method?

It should be String.

* Print, search, test method and result:

A screen shot of a computer program

Description automatically generated

A screen shot of a computer program

Description automatically generated

A screen shot of a computer program

Description automatically generated

A computer screen shot of text

Description automatically generated

A screenshot of a computer

Description automatically generated

1. **Implement Store class:**

A computer screen shot of text

Description automatically generated

A computer screen shot of text

Description automatically generated

1. **String, StringBuilder and StringBuffer:**

**A screen shot of a computer program

Description automatically generated**

A computer screen shot of a program code

Description automatically generated

A screen shot of a computer program

Description automatically generated