BÁO CÁO THỰC HÀNH LAB 03

THỰC HÀNH LẬP TRÌNH HƯỚNG ĐỐI TƯỢNG

Contents

1. [Working with method overloading 2](#_bookmark0)
   1. [Overloading by differing types of parameter 2](#_bookmark1)

[Code 2](#_bookmark2)

[Result 2](#_bookmark5)

* 1. [Overloading by differing the number of parameters 3](#_bookmark7)

[Code 3](#_bookmark8)

[Result 5](#_bookmark11)

1. [Passing parameter 6](#_bookmark13)

[Code 6](#_bookmark14)

[Result 6](#_bookmark16)

1. [Class Member and Instance Member 7](#_bookmark18)

[Code 7](#_bookmark19)

[Result 9](#_bookmark21)

1. [Open the Cart class 9](#_bookmark23)

[Code 9](#_bookmark24)

[Result 11](#_bookmark29)

1. [Implement the Store class 12](#_bookmark32)

[Code 12](#_bookmark33)

[Result 13](#_bookmark35)

1. [String, StringBuilder and StringBuffer 14](#_bookmark38)

[Code 14](#_bookmark39)

[Result 14](#_bookmark40)

[7 Class Diagram 16](#_bookmark46)

[Table of Figures 17](#_bookmark48)

# Working with method overloading

## Overloading by differing types of parameters

### Code

A screen shot of a computer code

Description automatically generated

Figure 1 Method addDigitalVideoDisc(DigitalVideoDisc [] dvdList)

A computer screen shot of a program code

Description automatically generated

Figure 2 Aims Class

### Result

A screenshot of a computer program

Description automatically generated

Figure 3 Result

## Overloading by differing the number of parameters

### Code

Figure 4 Method addDigitalVideoDisc(DigitalVideoDisc [] dvdList)



Figure 5 Aims Class

### Result

A screenshot of a computer

Description automatically generated

Figure 6 Result

# Passing parameter

# **Trả lời câu hỏi:**

# Sau khi gọi swap(jungleDVD, cinderellaDVD), tiêu đề của 2 đối tượng vẫn giữ nguyên bởi vì trong java, các phương thức được truyền vào với các tham số truyền tham trị, tức là chỉ truyền vào đó bản sao của các đối tượng sẵn có, nên chúng không ảnh hưởng gì đến những đặc tính sẵn có của đối tượng đó.

# Sau khi gọi changeTitle(jungleDVD, cinderellaDVD.getTitle()), tiêu đề của jungleDVD bị thay đổi bởi vì method này thực hiện gọi method setTitle(), tức là sẽ thay đổi tiêu đề của nói. Bên dưới là một phép gán, tuy nhiên trong java chỉ là phép gán trên bản sao nên không làm ảnh hưởng đến những thuộc tính vốn có của đối tượng

# -**Kết luận: Java luôn truyền tham trị cho các hàm sử dụng ngôn ngữ này để lập trình (pass value programming)**

## Code

## A screen shot of a computer program Description automatically generatedA screen shot of a computer program Description automatically generatedChưa thay đổi

## Đã thay đổi:

## A screen shot of a computer program Description automatically generatedA screen shot of a computer program Description automatically generated

## 

Figure 7 Passing parameter code

## Result

A screenshot of a computer program

Description automatically generated

A screen shot of a computer

Description automatically generated

Figure 8 Passing parameter result

# Class Member and Instance Member

## A screen shot of a computer Description automatically generatedA screenshot of a computer program Description automatically generatedCode

## A screen shot of a computer program Description automatically generated

Figure 9 Class member and Instance member

## Result

## A screenshot of a computer program Description automatically generated

Figure 10 Result

## 

# Open the Cart class

A computer screen shot of a program code

Description automatically generatedA black screen with text and numbers

Description automatically generated

## Code

Figure 11 Code method to print the content in Cart

A screen shot of a computer program

Description automatically generated

Figure 12 Code method search by id

A screen shot of a computer code

Description automatically generated

Figure 13 Code method search by title

A screen shot of a computer code

Description automatically generated

Figure 14 IsMatch() in DigitalVideoDisc class

A screen shot of a computer

Description automatically generated

## Result

A screenshot of a computer

Description automatically generatedFigure 15 CartTest class

Figure 16 Result

# Implement the Store class

A screen shot of a computer program

Description automatically generatedA computer screen shot of a program

Description automatically generated

## Code

Figure 17 Store Class

A screen shot of a computer

Description automatically generated

## Result

Figure 18 StoreTest class

A screenshot of a computer

Description automatically generated

Figure 19 Result

# String, StringBuilder and StringBuffer

## Code

## A screenshot of a computer program Description automatically generated

## A screenshot of a computer program Description automatically generated

Figure 20 So sánh String và StringBuilder

A screen shot of a computer program

Description automatically generated

Figure 21 GarbageCreator class

## A screenshot of a computer program Description automatically generatedA screenshot of a computer Description automatically generatedResult

Figure 22 Result: program hangs

A computer screen shot of a program

Description automatically generated

Figure 23 NoGarbage class

A screenshot of a computer

Description automatically generated

Figure 24 Result: Program finishes quickly

# 7 Class Diagram

Figure 25 Class Diagram

# Table of Figures

[Figure 1 Method addDigitalVideoDisc(DigitalVideoDisc [] dvdList) 2](#_bookmark3)

[Figure 2 Aims Class 2](#_bookmark4)

[Figure 3 Result 3](#_bookmark6)

[Figure 4 Method addDigitalVideoDisc(DigitalVideoDisc [] dvdList) 4](#_bookmark9)

[Figure 5 Aims Class 4](#_bookmark10)

[Figure 6 Result 5](#_bookmark12)

[Figure 7 Passing parameter code 6](#_bookmark15)

[Figure 8 Passing parameter result 6](#_bookmark17)

[Figure 9 Class member and Instance member 8](#_bookmark20)

[Figure 10 Result 9](#_bookmark22)

[Figure 11 Code method to print the content in Cart 9](#_bookmark25)

[Figure 12 Code method search by id 10](#_bookmark26)

[Figure 13 Code method search by title 10](#_bookmark27)

[Figure 14 IsMatch() in DigitalVideoDisc class 10](#_bookmark28)

[Figure 15 CartTest class 11](#_bookmark30)

[Figure 16 Result 11](#_bookmark31)

[Figure 17 Store Class 12](#_bookmark34)

[Figure 18 StoreTest class 13](#_bookmark36)

[Figure 19 Result 13](#_bookmark37)

[Figure 20 So sánh String và StringBuilder 14](#_bookmark41)

[Figure 21 GarbageCreator class 14](#_bookmark42)

[Figure 22 Result: program hangs 15](#_bookmark43)

[Figure 23 NoGarbage class 15](#_bookmark44)

[Figure 24 Result: Program finishes quickly 15](#_bookmark45)

[Figure 25 Class Diagram 16](#_bookmark47)