

Java Final Interview

Due May 2 at 2:10pm**Points** 100**Questions** 8**Time Limit** 5 Minutes

Instructions

Exam Instructions: 5 MINUTE TIME LIMIT, ONE QUESTION AT A TIME, NO GOING BACK

Read each question carefully and select the best choice or choices which answer that question.

Answer all questions within the time allotted.

Some questions have more than one correct answer. There is no credit for a partially answered question.

You may use your Eclipse IDE (or other instructor approved IDE).

You may not use any other materials or have any discussions with anyone except the instructor.

Taking this exam outside of these parameters will result in disqualification and a grade of zero.

Answer all questions.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	3 minutes	100 out of 100

Score for this quiz: **100** out of 100

Submitted May 2 at 2:03pm

This attempt took 3 minutes.

Question 1

20 / 20 pts

Choose the answer which is the BEST description for the following code:

```
package edu.neu.csye6200;

public class Driver {

    public static void main(String[] args) {
        System.out.println(this);
    }

}
```

Correct!☒ Bad code.

That is correct!

☐ Calls `Object.toString()`;☐ Calls `Driver.toString()`;☐ Good code.

Yes, this is bad code because the `this` pointer is not available in static methods.

Question 2**10 / 10 pts**

Choose the selection with the code WITH an OBVIOUS coding ERROR?

☐ `List<String> names = new ArrayList<String>();`☐ `List<String> names = new ArrayList<>();`☒ `List<> names = new ArrayList<String>();`

That is correct!

☐ `ArrayList<String> names = new ArrayList<String>();`**Correct!****Question 3****10 / 10 pts**

When programming in Java, which of the Object Oriented Design Principles is ALWAYS used?

☐ Object Oriented Encapsulation principle

Correct!

☒ Object Oriented Inheritance principle

That is correct!

☐ Object Oriented Abstraction principle

☐ Object Oriented Polymorphism principle

Question 4

15 / 15 pts

Choose the CHOICE which is the BEST description the following code:

```
List<String> names = new ArrayList<>();
```

☐ Code demonstrates Object Oriented Polymorphism principle.

Correct!

☒ All the choices are BEST.

Tthat is correct!

☐ Code demonstrates Object Oriented Inheritance principle.

☐ Code demonstrates Object Oriented Abstraction principle.

Question 5

10 / 10 pts

```
new Thread(() -> System.out.println("Hello there!")).start();
```

Given the preceding Java statement,

FILL IN THE BLANK with the MOST PRECISE AND CORRECT data type of the argument which is passed to the constructor (in the preceding Java statement):

Correct!

Runnable

That is correct!

Correct Answers

Runnable

the class constructor for the Thread class accepts an argument of data type Runnable

Question 6

10 / 10 pts

Given the following code fragment:

```
List<String> names = new ArrayList<>();
```

Choose, from the following, the most appropriate answer or answers.

SELECT WHICH S.O.L.I.D. design principles this java code statement CLEARLY AND OBVIOUSLY demonstrates.

Correct!

☒ Dependency Inversion principle

☐ Interface Segregation Principle

Correct!☒ Liskov substitution principle☐ Sole Responsibility Principle**Correct!**☒ Open Closed principle;

Yes, that is correct!

Question 7**15 / 15 pts**

Which Solid Design principles does the Simple Factory Pattern, not the Gang of Four Factory (GoF) design pattern), CLEARLY violate?

Correct!☒ Sole Responsibility Principle**Correct!**☒ Liskov Substitution principle☐ Interface Segregation Principle**Correct!**☒ Open Closed principle**Correct!**☒ Dependency Inversion principle

Yes, that is correct!

The Simple Factory design pattern differs from the GoF Factory design pattern in that it one class is responsible for the creation of more than one derived class. The GoF Factory design pattern uses one class for the creation of only one derived class.

Question 8**10 / 10 pts**

```
package edu.neu.csye6200;  
  
public class Driver {  
  
    public static void main(String[] args) {  
        System.out.println(new Driver());  
    }  
}
```

Given the above Driver class, which Object Oriented Design principle is most clearly and OBVIOUSLY demonstrated?

☐ Encapsulation☐ Polymorphism☒ Inheritance☐ Abstraction**Correct!**

Yes, that is correct!

Quiz Score: 100 out of 100