

Programming Using Java

Spring 2015 FINAL EXAM

Welcome to the Class!

This will cover all the entire Programming Using Java course.

The final exam has 10 questions.

You have 15 minutes to complete this quiz.

Directions

Type in 1 in the Answer Box if you think Option 1 is the correct answer

Type in 2 in the Answer Box if you think Option 2 is the correct answer

Type in 3 in the Answer Box if you think Option 3 is the correct answer Type in 4 in the Answer Box if you think Option 4 is the correct answer

Question 1

A student creates a file called Example1.java and Example2.java in an Eclipse project called StarterPack under the src folder.

What will happen when the file is compiled

- 1. Example1.class and Example2.class get generated under the bin folder
- 2. A single class called StarterPack.class gets generated under the bin folder
- 3. An error occurs since only 1 file ending in .java can exist under the src folder
- 4. The folders are mixed up. Example1.java and Example2.java need to be under bin folder.

Write your answer below

Answer

Question 2

A student defines 2 classes called Example, Example1 and Example2

```
package com.tinkeracademy.java;
public abstract class Example {
   public abstract void printHello();
}
```

```
package com.tinkeracademy.java;
public class Example1 extends Example {
    public void printHello() {
        System.out.println("Hello from Example 1");
    }
}
```

```
package com.tinkeracademy.java;
public class Example2 extends Example1 {
    public void printHello() {
        System.out.println("Hello from Example 2");
    }
}
```

What of the following is true

- 1. Example2 is a superclass of Example1
- 2. Example1 is a subclass of Example2
- 3. Example2 is a subclass of Example1
- 4. Example1 is a superclass of Example

Write your answer below

Answer

Question 3

The UML class diagram for the class hierarchy for Bukkit commands is as follows

java.lang.Object
Ŷ
org.bukkit.command.Command
Û
org.bukkit.command.defaults.BukkitCommand

Suppose the class org.bukkit.command.Command has a field called "protectedLevelAccess" of datatype int with protected access.

Can a method in the class org.bukkit.command.defaults.BukkitCommand access the field "protectedLevelAccess" access

- 1. Yes, if the method in the class org.bukkit.command.defaults.BukkitCommand has protected access
- 2. Yes, if the method in the class org.bukkit.command.defaults.BukkitCommand has public access
- 3. Yes, always
- 4. No, never

Write your answer below

Answer

Question 4

A student defines a new class called Example1 as follows

```
public class Example1 {
}
```

Which class does Example1 extend?

1. The Object class (since by default every class extends the Object class)

- 2. The Class class (since by default every class extends the Class class)
- 3. None. It does not extend any class
- 4. The code above is wrong. The class signature for Example1 needs the extends keyword

Write your answer below

Answer

Question 5

Which of the following statements is true?

- 1. A subclass cannot declare any new methods
- 2. A subclass cannot declare any new fields
- 3. A subclass cannot be abstract
- 4. A superclass can be abstract

Write your answer below

Answer

Question 6

Is A1JavaClass.java a valid source file?

A1JavaClass.java

```
public class AJavaClass
{
```

- 1. No, a source file name cannot have a number
- 2. No, a source file name should match the class name
- 3. Yes, a source file name need not match the class name
- 4. Yes, a source file can contain any valid Java code

Write your answer below

Answer

}

Question 7

A Student has written the Java code below.

The code extends the class org.bukkit.command.Command.

The class org.bukkit.command.Command has a constructor whose signature is as follows

protected Command(String name)

```
package com.tinkeracademy.java;
import org.bukkit.command.Command;
public class MyCommand extends Command
{
    public MyCommand(String name) {
        super(name);
    }
}
```

- 1. This is valid code and will compile
- 2. This is not valid code. The MyCommand should not define its own constructor.
- 3. This is not valid code. The MyCommand should always define a constructor with no input
- 4. This is not valid code. The super can never be used in a constructor.

Write your answer below

Answer

Question 8

A student created a Java Source File called "final Exam.java". The file name starts with a lowercase letter and has a space.

Which of the following best describes the Source File name?

1. The Source File name is valid

- 2. The Source File name should start with an uppercase letter (by Java convention).
- 3. The Source File name should not include any spaces.
- 4. Both 2 and 3 above

Write your answer below

Answer

Question 9

What is the role of the Java Virtual Machine?

- 1. It is used to compile the Java Source code into Java Byte Code
- 2. It is used to compile the Java Source code into C++ Source Code
- 3. It acts as a virtual computer and is used to execute Java Byte Code
- 4. It acts as a virtual computer and is used to execute Java Source Code

Write your answer below

Answer

Question 10

Which of the following is False?

- 1. A Java class with public access should be defined in a Java source file with the same name
- 2. The keyword public in a method signature indicates that the all other parts of the program can access this method
- 3. The keyword static in a method signature indicates that the method can be called by the Java Virtual Machine (JVM) before an object of the class has been created.
- 4. The keyword void indicates that the method can never be invoked.

Write your answer below

Answer