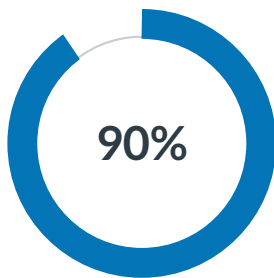


# Results

Alexander Hocevar-Smith



**270**  
Out of 300 points

**34:59**  
Time for this attempt

## Your Answers:

1 10 / 10 points

What is Inheritance in Object-Oriented Programming?

- ☐ Process of hiding the implementation details from the user, only the functionality will be provided to the user. In other words, the user will have the information on what the object does instead of how it does it.
- ☐ A process that binds together the data and functions that manipulate the data and that keeps both safe from outside interference and misuse.
- ☐ Refers to the ability of a variable, function or object to take on multiple forms



An ability by which one class acquires the properties and behaviors of another class

2 10 / 10 points

Which of these operators is used to allocate memory to the Array variable in Java?



☒ new

- ☐ alloc
- ☐ new malloc
- ☐ malloc

3

0 / 10 points

What is the output of the following Java program? Please assume all classes are in the same package.

```
class A {
    String E = "extraction ";
    String T = "transformation ";
    String L = "loading ";
    final void ETL() {
        System.out.println(L + T + E);
    };
}
class B extends A {
    void ETL() {
        System.out.println(E + T + L);
    }
}
public class Main {
    public static void main(String args[]) {
        A obj = new B();
        obj.ETL();
    }
}
```

- ☐ Compile time error
- ☐ Runtime error
- ☐ extraction transformation loading
- ☐ None of the mentioned



loading transformation extraction

Correct Answer:

Compile time error

4

10 / 10 points

A method declaration has (check all that are correct):



A return-type, or void if no value is returned.



A name



At least one parameter



An optional access specifier which, if not present, defaults to package access.



Parentheses () - with or without a parameter list.

5

10 / 10 points

\_\_\_\_\_ can be declared anywhere within the class definition, but by convention, they are declared near the **top of the class definition**.



Class variable



None of the mentioned



Temporary variable



Local variable

6

10 / 10 points

What is the extension of Java source code files?

☐ .jar☐ .class☐ .jv☒ .java

7

10 / 10 points

What is the output of the following Java program? Please assume all classes are in the same package.

```
class A {
    public String[] getSdlc() {
        return sdlc;
    }

    String sdlc[] = {
        "requirement analysis",
        "design",
        "development",
        "testing",
        "implementation",
        "maintenance"
    };
}
class B extends A {
    public String[] getSdlc() {
        return sdlc;
    }

    private String sdlc[] = {
        "r","d","d","t","i","m"
    };
}
class C extends B {
    public String[] getSdlc() {
        return sdlc;
    }

    String sdlc[] = {
```

```
        "s","d","l","c"
    };
}
public class Main {
    public static void main(String args[]) {
        B obj = new C();
        for (int i = 0; i < obj.getSdlc().length;
            i++) {
            System.out.print(obj.getSdlc()[i] + "");
        }
    }
}
```

☐ Compile time error

☐ Runtime error



☒ sdlc

☐ rddtim

☐ requirement analysis design development testing implementation maintenance

8

10 / 10 points

What is the return type of Constructors?...

☐ float



☒ No explicit return type

☐ int

☐ void

9

10 / 10 points

What is the output of the following Java program?

```
public class Jump_statments {  
    public static void main(String args[]) {  
        int x = 2;  
        int y = 0;  
        for (; y < 10; ++y) {  
            if (y % x == 0)  
                continue;  
            else if (y == 8)  
                break;  
            else  
                System.out.print(y + " ");  
        }  
    }  
}
```

- ☐ 1357
- ☐ 123456789
- ☐ 2468



☒ 13579

10

10 / 10 points

Which keyword(s) can be part of a class declaration? (check all that are correct)

☐ extend



☒ class

☐ switch



☒ implements



☒ extends

11 10 / 10 points

Which of the following best describes the meaning of static?

- ☐ The static keyword, when applied to fields, means that the field can only be accessed through instances of the class.
- ☒ The static keyword can be applied to class members. This implies that the class members (static ones) belong to the class, not to instances of the class.
- ☐ The static keyword can be applied to local variables. This implies that their values persist between calls to the method that declares the variable.
- ☐ When applied to a class, the static keyword implies that instances of the class are immutable.

12 10 / 10 points

Which of these statements is incorrect?

- ☐ Abstract classes may or may not have abstract methods.
- ☐ Abstract classes can have constructors.
- ☐ Interfaces cannot have constructors.

☒ Interfaces can be instantiated

13 10 / 10 points

Which of the following modifier means a particular variable cannot be accessed from other class even within the same package?

☒ private

- ☐ protected
- ☐ public

☐ default

14 0 / 10 points

What is Polymorphism In object-oriented programing?



☒ An ability by which one class acquires the properties and behaviors of another class

Correct Answer:

**Refers to the ability of a variable, function or object to take on multiple forms**

- ☐ A process that binds together the data and functions that manipulate the data and that keeps both safe from outside interference and misuse.
- ☐ Process of hiding the implementation details from the user, only the functionality will be provided to the user. In other words, the user will have the information on what the object does instead of how it does it.
- ☐ Refers to the ability of a variable, function or object to take on multiple forms

15 10 / 10 points

IS-A relationship in Java is related to -



☒ Inheritance

- ☐ Encapsulation
- ☐ Composition
- ☐ None of the mentioned

16 10 / 10 points

The fields/variables in an interface are implicitly specified as -

- ☐ static only
- ☐ final only



☐ Integer



☒ static and final

17 10 / 10 points

What is the process of defining more than one method in a class differentiated by method signature?



☒ Method Overloading

☐ Method Overlapping

☐ Method Overriding

☐ Method Overwriting

18 10 / 10 points

What is the output of the following Java program? Please assume all classes are in the same package.

```
class A {  
    void ETL() {  
        String E = "mySQL";  
        String T = "Sqoop";  
        String L = "hdfs";  
        System.out.println(E + T + L);  
    };  
    void ETL(String ETL) {  
        System.out.println(ETL.toUpperCase());  
    }  
    void ETL(String E, String T, String L) {  
        System.out.println(E + T + L);  
    }  
}  
  
public class Main {  
    public static void main(String args[]) {  
        String E = "extraction1";
```

```
String T = "transformation2";  
String L = "loading3";  
A obj = new A();  
obj.ETL(E + T + L);  
}  
}
```

☐ mySQLSqoopdfs



☒ EXTRACTION1TRANSFORMATION2LOADING3

☐ extraction1transformation2loading3

☐ EXTRACTION1 TRANSFORMATION2 LOADING3

19 0 / 10 points

What is Autoboxing?

☐ A mechanism of Abstraction

☐ when a primitive value is automatically converted to its matching wrapper class object

☐ A mechanism of wrapping the data (variables) and code acting on the data (methods) together as a single unit



☒ when an object of a wrapper class is automatically converted to its matching primitive value

Correct Answer: **when a primitive value is automatically converted to its matching wrapper class object**

20 10 / 10 points

Java does not support\_\_\_\_\_.



☒ Multiple inheritance for classes

☐ Interface

- ☐ Method Overriding
- ☐ Polymorphism

21 10 / 10 points

What is the most likely output of this program?

```
public class Main {  
    public static void main(String[] args) {  
        StringBuffer sb = new StringBuffer("135");  
        sb.replace(0, 5, "6789").insert(0, "12345");  
        System.out.println(sb.reverse().delete(0, 5));  
    }  
}
```

- ☐ StringIndexOutOfBoundsException
- ☐ 123456789
- ☐ 6789



☒ 4321

22 10 / 10 points

How many copies of static (class) variables and instance variables are created when 10 objects are created of a class?



☒ 1, 10

- ☐ 10,1
- ☐ 10, 10
- ☐ 1,1

23 10 / 10 points

If a class of a Java program has a plural number of methods, and all of them have the same name but different parameters (with a change in type or number of arguments), then it is known as method overloading.

☒ True☐ False

24 10 / 10 points

What is Truncation for numeric variables in Java?

☐ Floating-point value assigned to an Floating type☐ Integer value assigned to floating type☒ Floating-point value assigned to an integer type☐ None of the Mentioned

25 10 / 10 points

Which of the following loops will execute the body of loop even when condition controlling the loop is initially false?

☐ while☐ None of the above☒ do-while☐ for

26 10 / 10 points

**In Java, what is the difference between the String Class and the StringBuffer Class?**

- ☐ No difference, the two classes are equivalent.
- ☐ StringBuffer is the parent/super case of String.
- ☒ A String is immutable, if you try to alter its value, another object gets created. A StringBuffer is mutable so it can change its value.
- ☐ A StringBuffer is immutable, if you try to alter its value, another object gets created. A String is mutable so it can change its value.

**27** 10 / 10 points

Which of the following is a valid declaration of an object of class Box?

- ☐ obj = new Box();
- ☐ Box obj = new Box;
- ☒ Box obj = new Box();
- ☐ Box new obj;

**28** 10 / 10 points

Given these code snippets:

```
public abstract class Mineral {  
    // define abstract methods for origin, hardness and  
    appearance.  
}  
public class Diamond extends Mineral {  
    // implement origin, hardness and appearance methods.  
}
```

Is the following assignment valid?  
Diamond d = new Mineral();

☒ NO☐ YES

29

10 / 10 points

What is the output of the following program? Assume that each class is correctly declared in its own file and that the main method of Chemistry is the JVM entry point. Please assume all classes are in the same package.

```
public class Element {
    public String appearance() {
        return "OVERRIDE THIS METHOD";
    }
}
public class Iodine extends Element {
    @Override public String appearance() {
        return "lustrous, purple-black non-metallic solid";
    }
}
public class Chemistry {
    public static void main(String[] args) {
        Element e = new Iodine();
        System.out.println(e.appearance());
    }
}
```

- ☐ OVERRIDE THIS METHOD
- ☐ The program will not compile because Iodine is not an Element.
- ☐ OVERRIDE THIS METHOD lustrous, purple-black non-metallic solid

☒ lustrous, purple-black non-metallic solid

30

10 / 10 points

What is the most likely output of this program?

```
public class Main {  
    public static void main(String[] args) {  
        StringJoiner sj1 = new StringJoiner(":", "{", "}");  
        StringJoiner sj2 = new StringJoiner(",", "[", "]");  
        sj1.add("Name").add("Tony");  
        sj2.add("LastName").add("Strak");  
        System.out.println(sj1.merge(sj2).toString());  
    }  
}
```

- ☐ Unresolved compilation problem: The method merge(":", "{",}") in the type StringJoiner is not applicable for the arguments ("", "[", "]")
- ☐ {[LastName,Strak,Name:Tony]}
- ☐ {Name:Tony:[LastName,Strak]}



{Name:Tony:LastName,Strak}