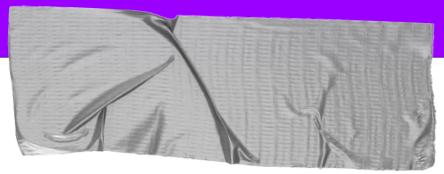
Java Certified #6

A question lead guide to prepare Java certification



Using Object-Oriented Concepts in Java

Which of the following statements is correct about a final class?

- ➔ **It cannot extend another class**
- ➔ **It must contain at least a final method**
- ➔ **It cannot be extended by any other class**
- ➔ **It cannot implement any interface**
- ➔ **The final keyword in its declaration must go right before the class keyword**

It cannot be extended by any other class

`It cannot be extended by any other class` is correct because, by definition, a final class is a class that cannot be extended.

Normally, the `final` and `class` keywords are put next to each other. However, this isn't a requirement. For instance, we can declare a class like this:

```
final public Foo { /* class body*/}
```

Due to the flexibility in modifier order,

`The final keyword in its declaration must go right before the class keyword`

is incorrect.

Also, a final class done;t need to meet any restrictions mentioned in the remaining options.

Working with Streams and Lambda expressions

Which of the following can be the body of a lambda expression?

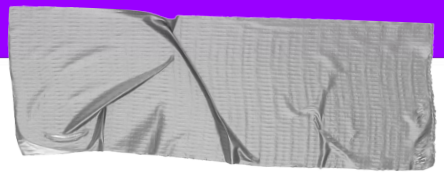
- ➔ **Two expressions**
- ➔ **Two statements**
- ➔ **An expression and a statement**
- ➔ **A statement block**
- ➔ **None of the above**

A statement block

A lambda expression is like a method: it provides a list of formal parameters and a body - an expression or **block** - expressed in terms of those parameters.

https://docs.oracle.com/javase/specs/jls/se11/html/jls-15.html#jls-15.27

https://docs.oracle.com/javase/tutorial/java/javaOO/lambdaexpressions.html



Working with Streams and Lambda expressions

Given:

```
Stream<String> strings = Stream.of("United", "States");
BinaryOperator<String> operator = (s1,s2)->s1.concat(s2.toUpperCase());
String result = strings.reduce("-", operator);
System.out.println(result);
```

What is the output of this code fragment?

- ➔ **-UnitedSTATES**
- ➔ **-UnitedStates**
- ➔ **United-States**
- ➔ **-UNITEDSTATES**
- ➔ **UnitedStates**
- ➔ **United-STATES**
- ➔ **UNITED-STATES**

-UNITEDSTATES

The `Stream.reduce` method performs a reduction on elements of the current stream, using the provided identity value and an associative accumulation function, and returns the reduced value. This means the hyphen `-` character is the identity and is inserted just once.

Except for the identity, all String elements in the stream are converted to uppercase when it's appended to the preceding element. Therefore, the output string is `-UNITEDSTATES` .

`https://docs.oracle.com/en/java/javase/11/docs/api/java.base/java/util/stream/Stream.html#reduce(T,java.util.function.BinaryOperator)`

https://bit.ly/javaOCP