

QUIZZ : Stream & Lambdas

1. Which of the following are correct lambda expressions?

- (A) `(int x, int y) -> x + y`
- (B) `(String s) -> { System.out.println(s); }`
- (C) `() -> "Hello"`
- (D) `(s1, s2) -> s1.compareToIgnoreCase(s2)`

2. Easy? Let's try these expressions.

- (A) `() -> () -> "hi"`
- (B) `flag ? () -> "ninja" : () -> "squad"`
- (C) `(a,) -> "Hello"`
- (D) `Integer::parseInt`

3. A lambda is an implementation of :

- (A) Any interface
- (B) An anonymous inner class

(C)

A functional interface

4. How are functional interfaces so special?

(A) They only have
abstract methods

(B) They must have been
annotated with
`@FunctionalInterface`

(C) They can only have
one abstract method

5. What's the role of the new package `java.util.function`?

(A) Providing a new Date API

(A) Containing the new class `Lambda.java`

(B) Providing useful functional interfaces

6. Why is there a compilation error for this code ?

```
int sum = 0;  
list.forEach(e -> { sum += e.size(); });
```

- | | |
|-----|------------------------------------|
| (A) | The lambda expression is incorrect |
| (B) | There is no forEach method on List |
| (C) | sum is not final |

7. Default methods must have a body

- | | |
|-----|-------|
| (A) | True |
| (B) | False |

8. Default methods are inherited

- | | |
|-----|-------|
| (A) | True |
| (B) | False |

9. Default methods can be overridden

(A) True

(B) False

10. What are the new default methods available for the Collection interface?

(A) `splitterator()`

(B) `stream()`

(C) `parallelStream()`

(D) `skip(int i)`

(E) `removeIf(Predicate filter)`

(F) `map(Function mapper)`

(G) `forEach(Consumer action)`

11. What are the new default methods available for the List interface?

(A) `sort()`

(B) `replaceAll()`

(C) `reverse()`

12. You can create a `Stream` on any collection

(A) True

(B) False

13. You can call the same methods on a `stream` and a `parallelStream`

(A) True

(B) False

14. Parallelism relies on the Fork/Join framework

(A) True

(B) False

15. What are the methods provided by the `Stream` interface?

(A) `collect(Collector collector)`

(B) `find()`

(C) `count()`

(D) `flatMap(Function flatMapper)`

(E) `limit()`

16. There are streams for primitives

(A) True

(B) False

17. Streams can operate lazily on infinite sources

(A) True

(B) False

18. What are the methods provided by the Collectors class?

(A) `counting()`

(B) `groupingBy(Function classifier)`

(C) `averagingInt(Function mapper)`

(D) `minBy(Comparator comparator)`

(E) `toArray()`

(F) `toList()`
