J09 Lambda Expressions

Lambda expressions

Functional Interfaces

A *functional interface* is an interface which only defines a single method.

Commonly-used functional interfaces are defined in package `java.util.function`, e.g.:

```
public interface IntPredicate {
    boolean test(int value);
}

public interface DoubleSupplier {
    double getAsDouble();
}
```

Lambda Expressions

Lambda expressions in Java are a shorthand for creating anonymous inner classes that implement functional interfaces.

- Syntax

    - Comma-separated formal parameters (x)

    - Arrow (->)

    - Body (either single expression or statement block, which may contain return)

        ```
        x -> x > 100  or  x -> { … return true; }
        ```