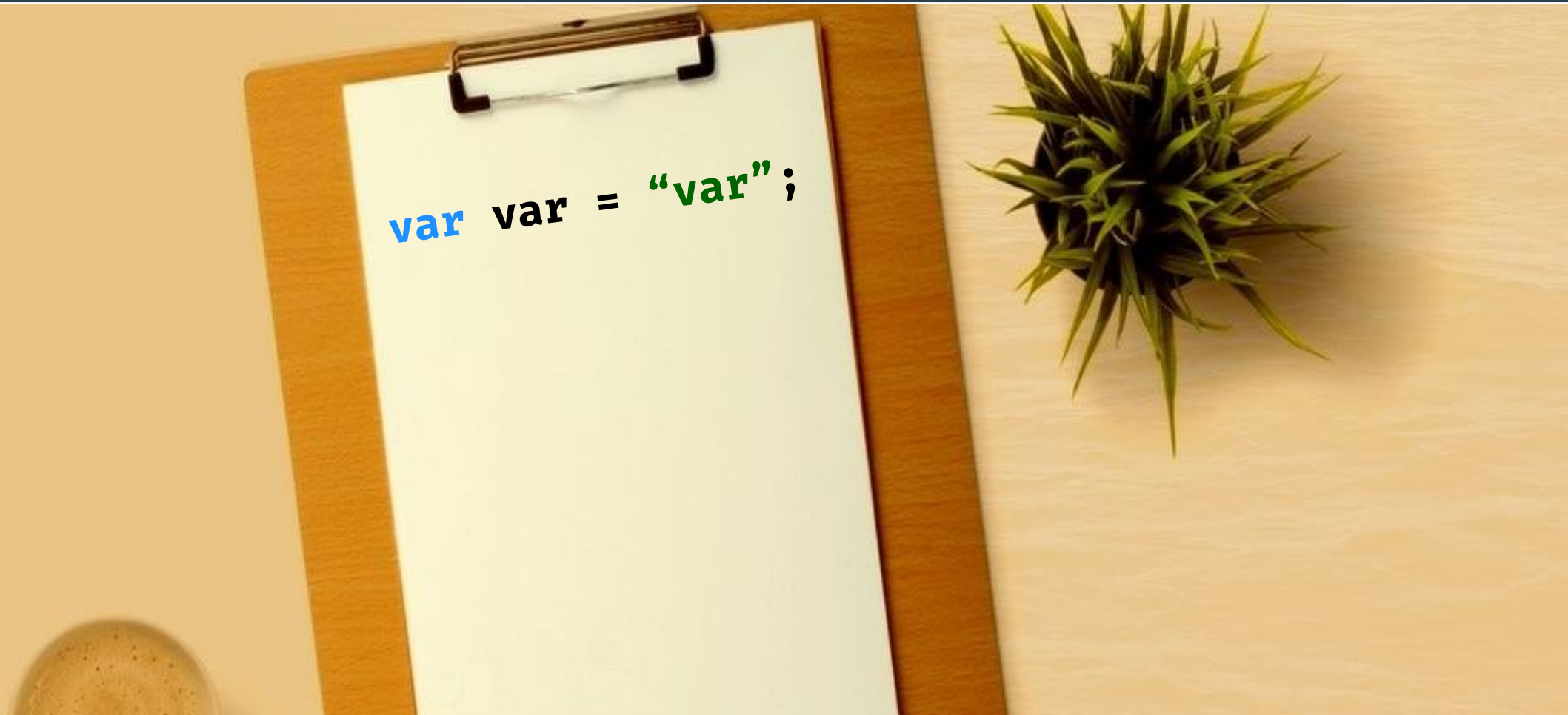
# Local-Variable Type Inference in Java 10



# Local-Variable Type Inference in Java 10

```
var list = new ArrayList<String>();
var stream = list.stream();
```

https://openjdk.java.net/jeps/286

# Summary

Enhance the Java Language to extend **type inference** to declarations of local variables with initializers.

# Goals

We seek to improve the developer experience by reducing the ceremony associated with writing Java code, while maintaining Java's commitment to static type safety, by allowing developers to elide the often-unnecessary manifest declaration of
local variable types.

# Goals

It would not be available for method formals, constructor formals, method return types, fields, catch formals, or any other kind of variable declaration.

# Syntax choice

- var x = expr only (like C#)
- var, plus val for immutable locals (like Scala, Kotlin)
- var, plus let for immutable locals (like Swift)
- auto x = expr (like C++)
- const x = expr (already a reserved word)
- final x = expr (already a reserved word)
- let x = expr
- def x = expr (like Groovy)
- x := expr (like Go)