

JShell

JShell: Intro

- JShell - Java Shell interactive tool
- Since Java SE 9
- Read-Evaluate-Print-Loop (REPL)
- Eases learning Java for students/developers/architect
- Exploring Java APIs
- Trail and Error

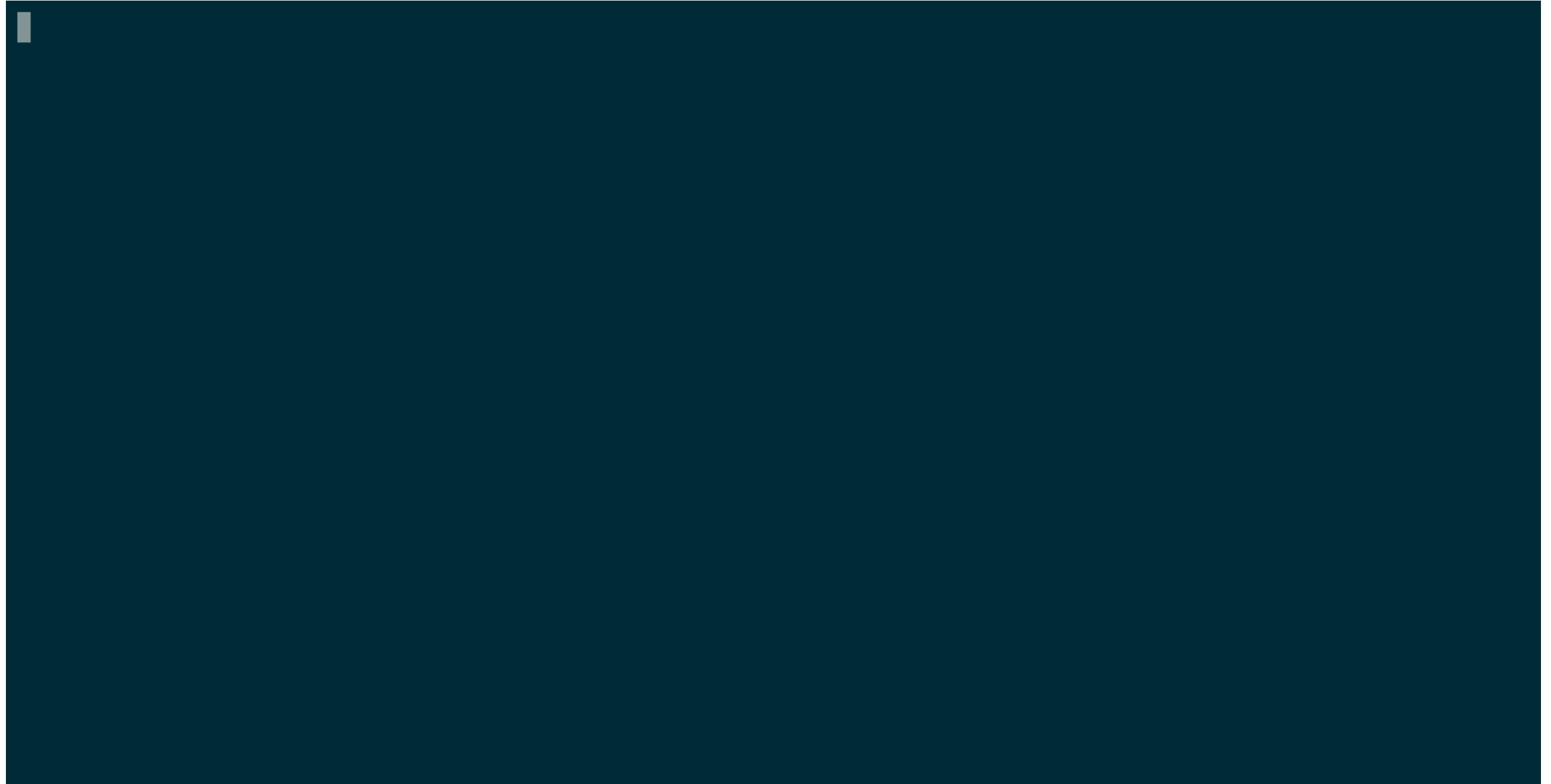
JShell: Why use

- Java program development involves following
 - Write complex program
 - Compile and fix any errors
 - Run the program
 - Figure out what is wrong with it
 - Edit the program
 - Repeat the steps
- Helps to perform all above in ENTER

JShell: What can/can't

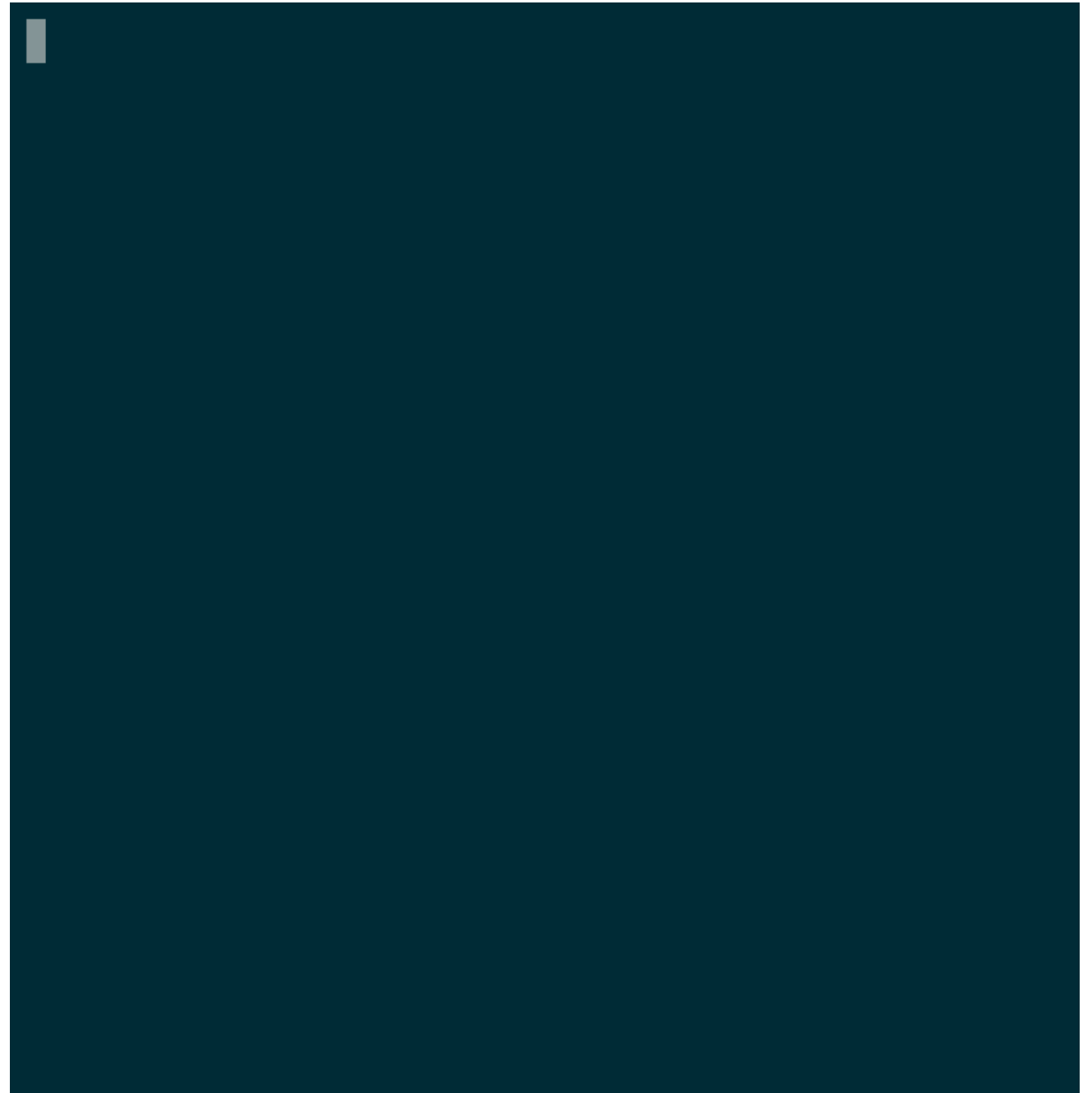
- Can
 - evaluates declaration, statements, expression
 - try out different variant of methods
 - experiment with unfamiliar APIs
- Can't use as
 - top level / package statements
 - static block
 - IDE

JShell: Get started



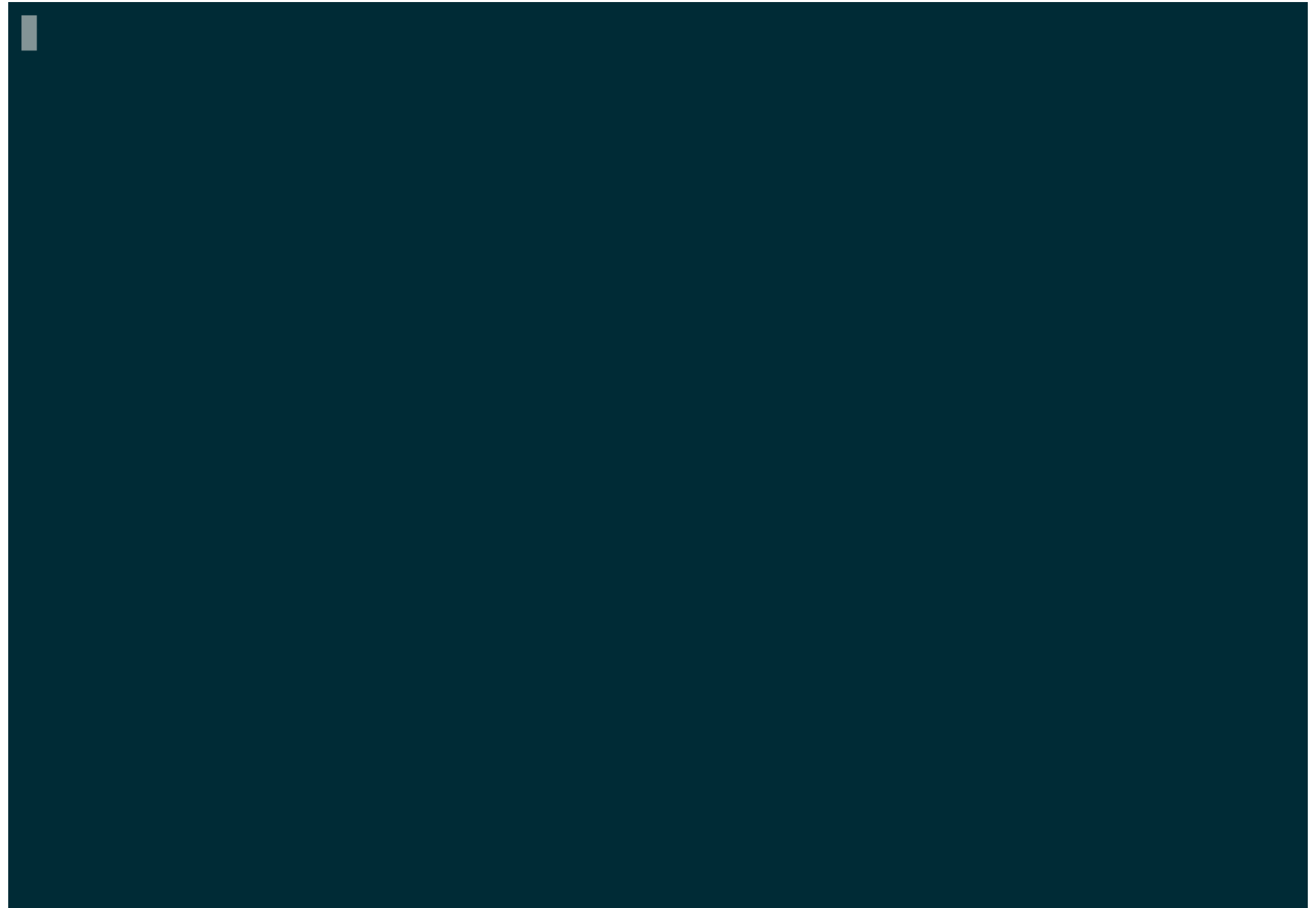
JShell: Trying out

- declaration
- statement
- expression



JShell: Trying out...

- Create class
- Declare method
- Create object



JShell: Helper features

Auto completion

```
1. jshell (java)
jshell> new String("Hello").to
toCharArray() toLowerCase() toString() toUpperCase()
jshell> new String("Hello").toUpperCase()
$1 ==> "HELLO"
```

External library

```
1. jshell (java)
jshell> /env --class-path gson-2.8.5.jar
| Setting new options and restoring state.

jshell> import com.google.gson.*

jshell> Gson gson = null
gson ==> null
```

Java API documentation

```
1. jshell (java)
jshell> Math.PI
Signatures:
Math.PI:double

<press tab again to see documentation>
jshell> Math.PI
Math.PI:double
The double value that is closer than any other to pi , the ratio of the
circumference of a circle to its diameter.
jshell> Math.PI
$3 ==> 3.141592653589793
```

ist by pressing <Tab> key enables
to completion and Java docs
atures.

hello".to<Tab> - Auto completion

hello".toUpperCase(<Tab>
gh level method details of javadocs

hello".toUpperCase(<Tab><Tab>
etailed method details of javadocs

JShell: Helper commands

Session commands

- /set
- /reset
- /reload
- /env
- /exit

Helper commands

- /help
- /?
- /history
- /!
- /id

Editor commands

- /edit
- /open
- /save

Snippet commands

- /list
- /types
- /methods
- /imports
- /vars

Demo

Q&A

Reference:

<https://docs.oracle.com/javase/10/jshell/toc.htm>

<https://docs.oracle.com/javase/9/jshell/JSHEL.pdf>

<https://docs.oracle.com/javase/9/tools/jshell.htm>