Overview of JShell

Slide 1

1

JShell: The Java Shell

- First introduced in Java 9

- Read-Evaluate-Print Loop (REPL) for Java similar to those that exist for other languages
  - evaluates input, prints results, and waits for next input

- Essentially an interpreter for simple Java expressions and programs

- Imports many Java packages by default.
  - `java.io`
  - `java.util`
  - `java.math`
  - `...`

- Other packages can be imported – uses `CLASSPATH`.

Slide 2

2

JShell
(continued)

- Terminating semicolons not required
  - end-of-line terminates an expression

- Use tab key for completions

- Start JShell by typing `jshell` at the command line.
  - `jshell -v` for verbose mode

- Exit by typing `/exit` at the JShell prompt.
  - Commands are distinguished from code snippets by a leading forward slash (/).
  - Other commands include
    - `/help`
    - `/list`
    - `/env`

©SoftMoore Consulting   Slide 3
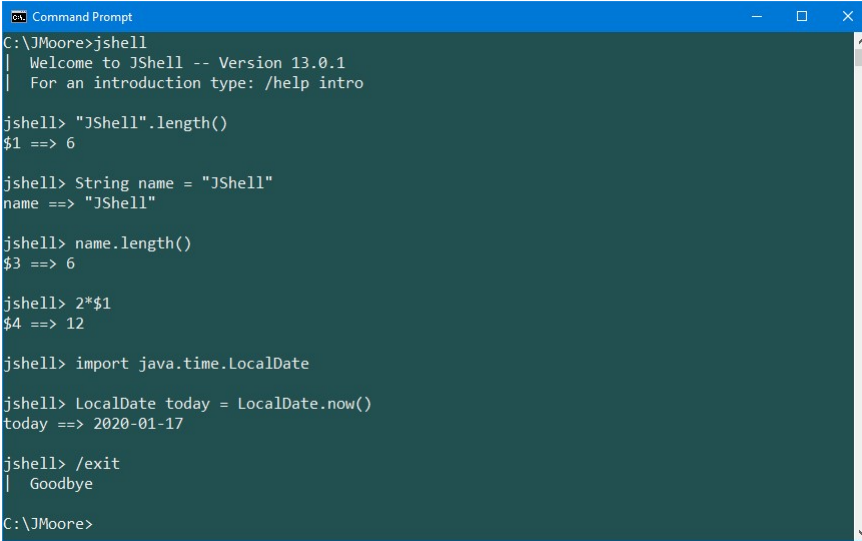
3

JShell Script Files

- JShell can be used to run JShell script files
  - sequence of code snippets and JShell commands in a file
  - one snippet or command per line.
  - uses ".jsh" suffix for file name

- Example
  `C:\JMoore> jshell myCode.jsh`

©SoftMoore Consulting   Slide 4

4

Sample Session

```
Command Prompt                                              —    □    ×

C:\JMoore>jshell
|  Welcome to JShell -- Version 13.0.1
|  For an introduction type: /help intro

jshell> "JShell".length()
$1 ==> 6

jshell> String name = "JShell"
name ==> "JShell"

jshell> name.length()
$3 ==> 6

jshell> 2*$1
$4 ==> 12

jshell> import java.time.LocalDate

jshell> LocalDate today = LocalDate.now()
today ==> 2020-01-17

jshell> /exit
|  Goodbye

C:\JMoore>
```

©SoftMoore Consulting   Slide 5

5