



Quarto + Positron

Part of "Doing data science in Positron" workshop

Posit Software, PBC



Positron is Quarto-ready out-of-the-box

- Bundles Quarto CLI (or uses Quarto it finds on your path)
- Bundles Quarto VS Code Extension

Demo

Basic Workflow

- Open `hello.qmd`
- Preview button (aka Render button in RStudio)
 - Quarto commands are run in Terminal pane
 - Preview opens in Viewer pane
- Command: **Quarto: Preview format...**

Preview button

Runs quarto preview in Terminal

Quarto version

Opens in Viewer

hello.qmd — positron-workshop-project

SESSION HELP VIEWER CONNECTIONS

http://localhost:6004/ Zoom: 100%

Hello, Quarto

Meet Quarto

Quarto enables you to weave together content and executable code into a finished document. To learn more about Quarto see <https://quarto.org>.

Meet the penguins

The *palmerpenguins* package contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica.

The plot below shows the relationship between flipper and bill

Command:
Quarto: Preview format ...

The [palmerpenguins](#) package contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica.

The plot below shows the relationship between flipper and bill

Preview HTML
format: html

Preview PDF (LaTeX)
format: pdf

Preview PDF (Typst)
format: typst

Preview MS Word
format: docx

Declared Formats

Other Formats

Preview

R 4.3.3

positron-workshop-project

hello.qmd

title: "Hello, Quarto"
format:
 html: default
 pdf: default

Run Cell | Run Next Cell

```{r}  
#| label: load-packages  
#| include: false

CONSOLE TERMINAL ...

posit/positron-workshop-project \$  
ers/charlottewickham/Documents/posit/positron-worksh  
op-project/hello.qmd --no-browser --no-watch-inputs

pandoc  
  to: html  
  output-file: hello.html  
  standalone: true  
  section-divs: true  
  html-math-method: mathjax  
  wrap: none  
  default-image-extension: png  
  variables: {}

metadata  
  document-css: false  
  link-citations: true  
  date-format: long  
  lang: en  
  title: Hello, Quarto

Output created: hello.html

Watching files for changes  
Browse at <http://localhost:3482/>  
Listening on http://127.0.0.1:3482/

main 0 △ 0 Quarto: 1.8.11

Charlotte Wickham (1 week ago) Ln 5, Col 15 Spaces: 2 UTF-8 LF Quarto Q

Quarto: |

Quarto: Preview Format... recently used

Explorer: Focus on Quarto View

Quarto: Clear Cache...

Quarto: Create Project

Quarto: Edit in Visual Mode

Quarto: Edit Mode

Quarto: Format Cell

Quarto: Go to Next Cell

Quarto: Go to Previous Cell

Quarto: Insert Code Cell

Quarto: New Document

Quarto: New Notebook (ipynb)

Quarto: New Presentation

Quarto: Pin Assist Panel

Quarto: Preview

CONSOLE TERMINAL ...

```
posit/positron-workshop-project $ quarto preview /Users/charlottewickham/Documents/posit/positron-workshop-project/hello.qmd --no-browser --no-watch-inputs
4/4 [plot-penguins]
output file: hello.knit.md

pandoc
 to: html
 output-file: hello.html
 standalone: true
 section-divs: true
 html-math-method: mathjax
 wrap: none
 default-image-extension: png
 variables: {}

metadata
 document-css: false
 link-citations: true
 date-format: long
 lang: en
 title: Hello, Quarto

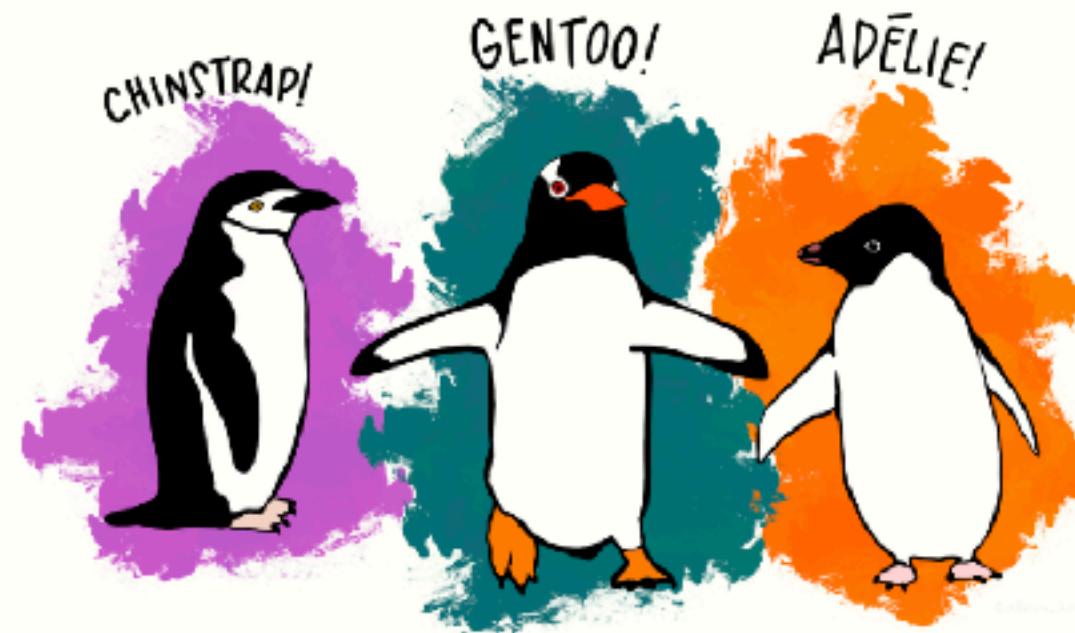
Output created: hello.html
Watching files for changes
```

Connections Zoom: 100%

ave together content and shed document. To learn more [quarto.org](#).

## Meet the penguins

The penguin data from the



CHINSTRAP! GENTOO! ADÉLIE!

[palmerpenguins](#) package contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica.

The plot below shows the relationship between flipper and

Charlotte Wickham (1 week ago) Ln 5, Col 15 Spaces: 2 UTF-8 LF Quarto Q

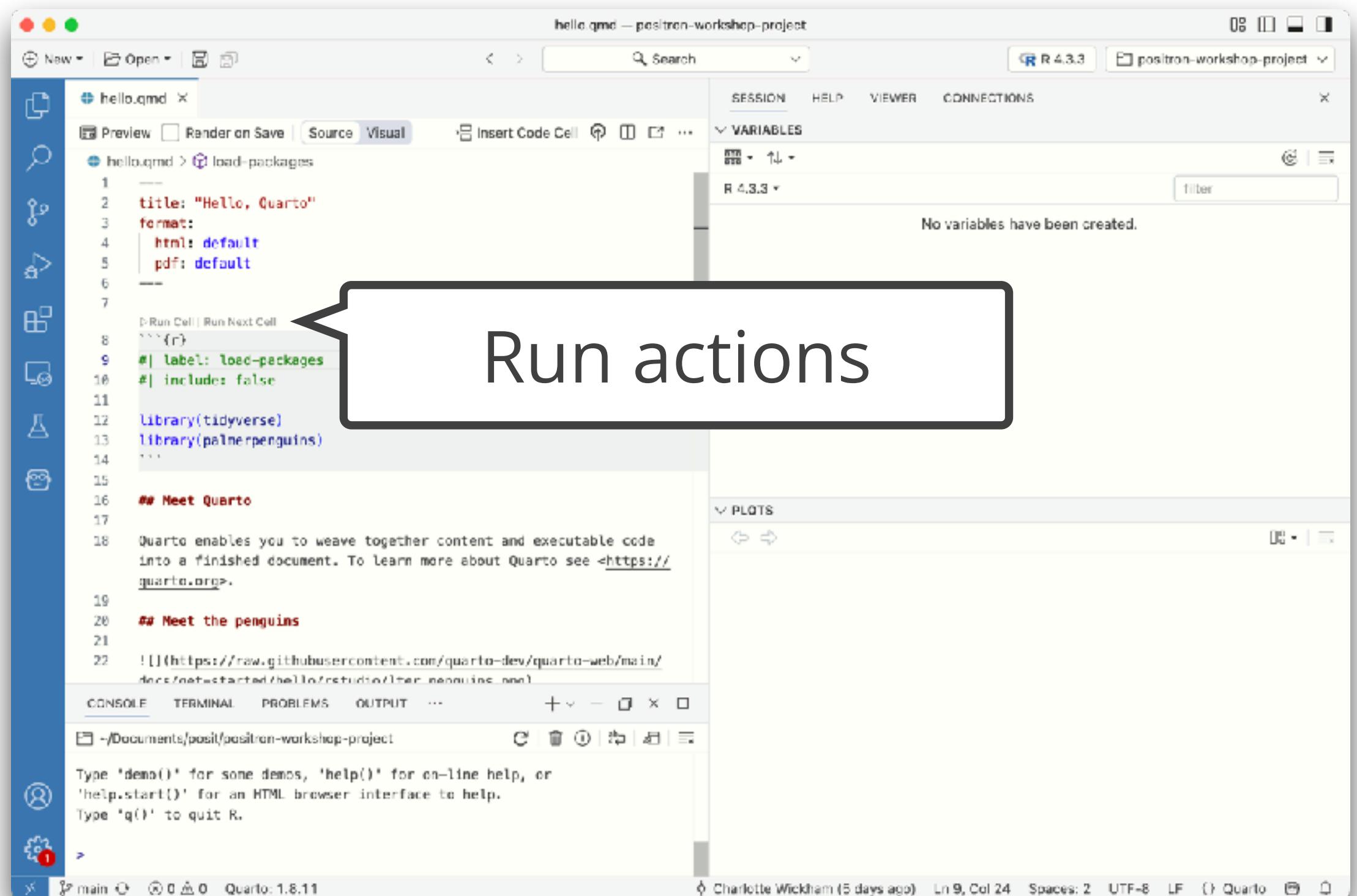
# Demo

## Document Workflow

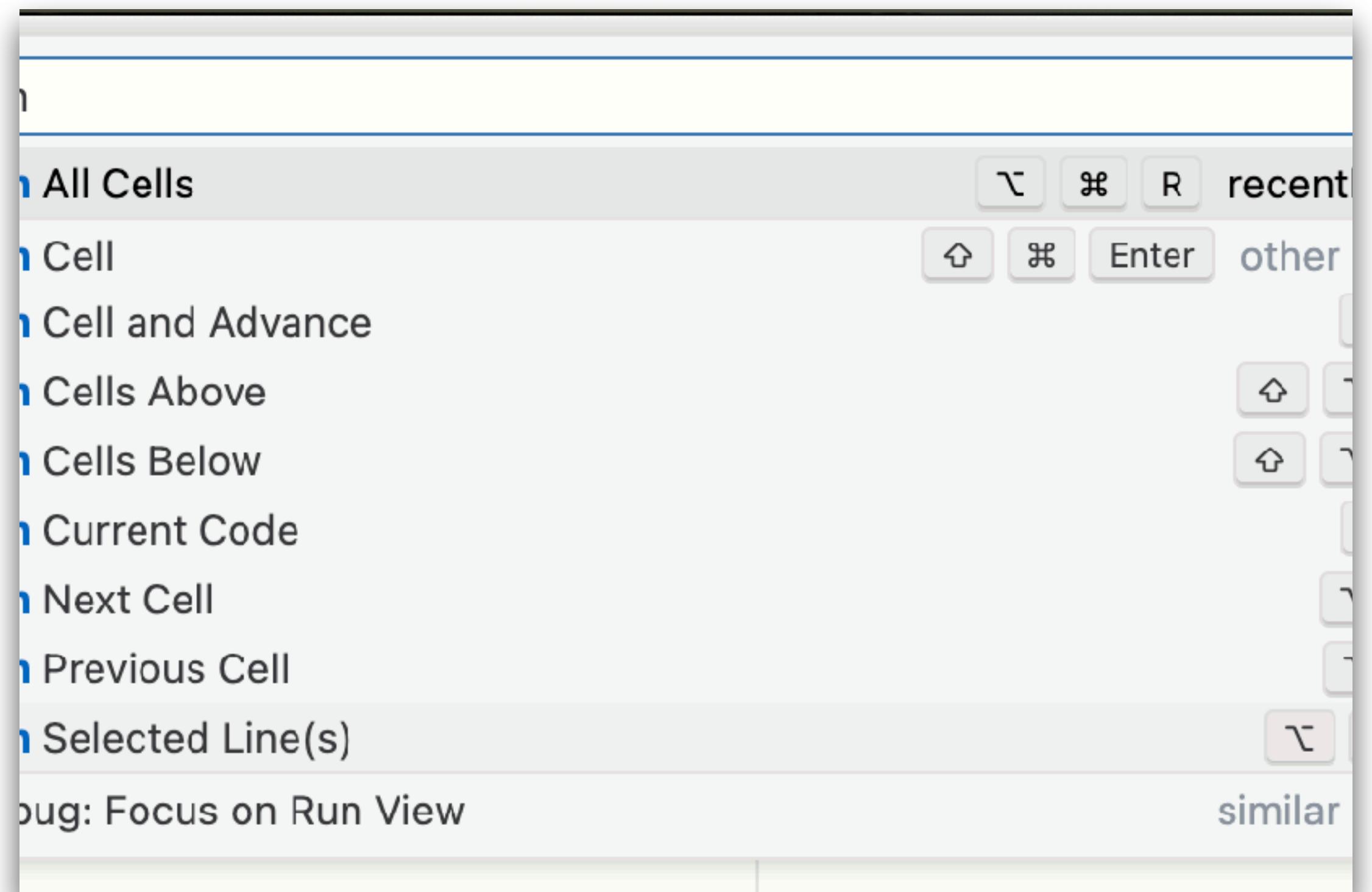
- Code cells
  - Run Selection: cmd/ctrl+enter
  - Run Cell: shift+cmd/ctrl+enter
  - Command Palette: **Quarto: Run ...**
- Navigation: Breadcrumbs, Outline pane, Command palette: **Go to Symbol in Editor**
- Visual mode
  - Insert Anything: /

# Code Cells

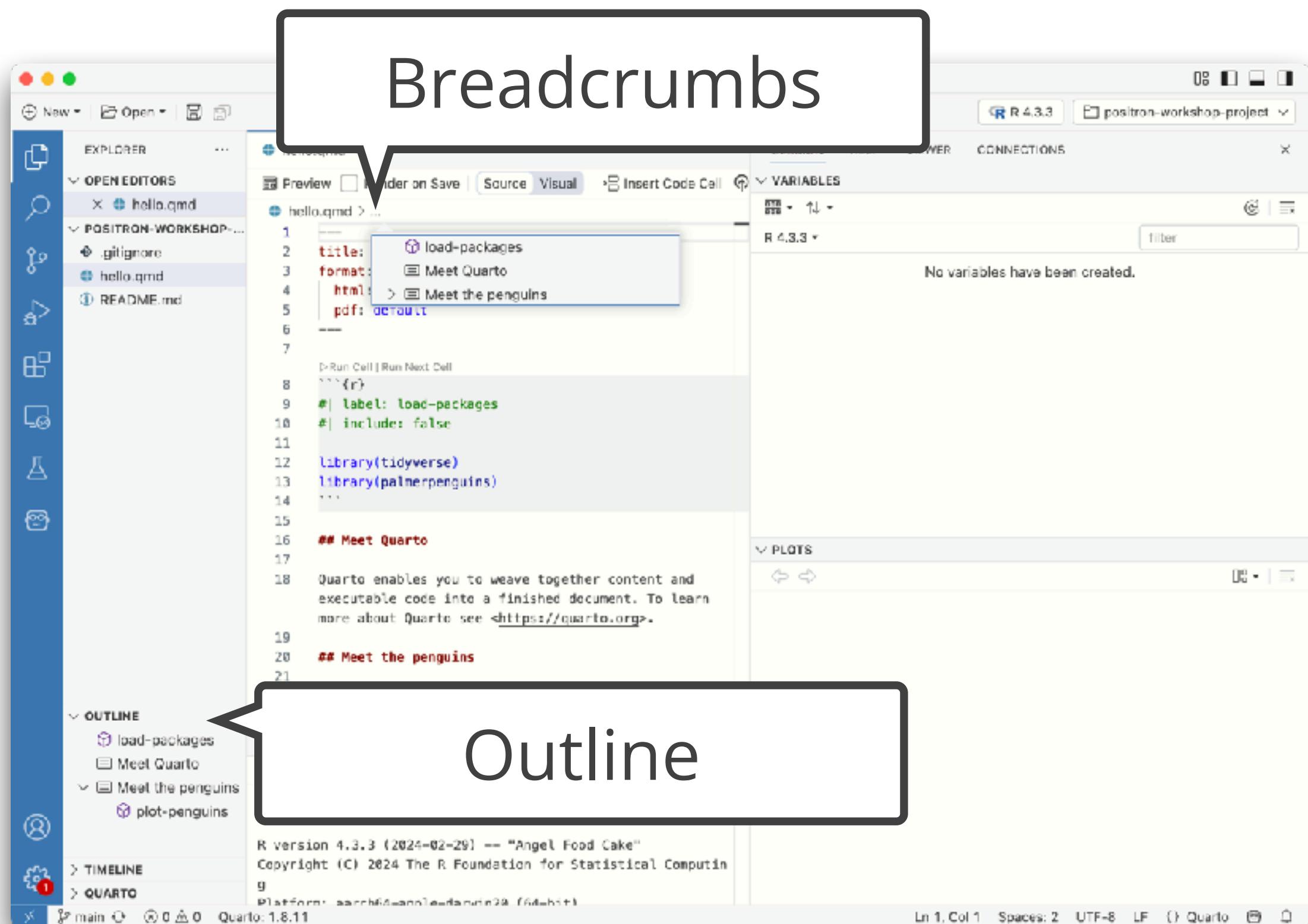
Commands:  
Quarto: Run ...



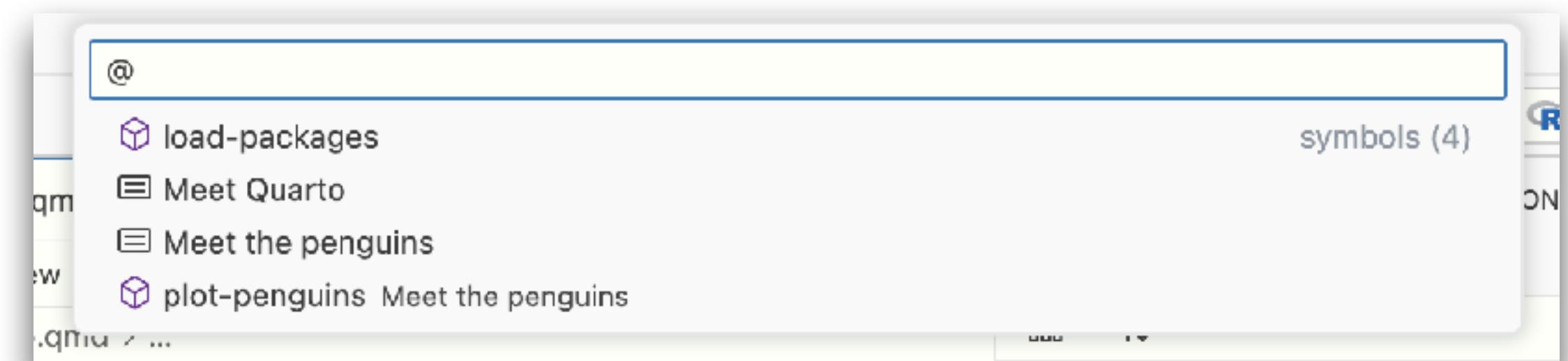
A screenshot of the Quarto IDE interface. The main window shows a QMD file named "hello.qmd". The code contains several code cells, some of which are highlighted with a black rounded rectangle. A large callout box labeled "Run actions" points to one of these highlighted cells. The interface includes a sidebar with icons for file operations, a search bar, and tabs for "Preview", "Source", and "Visual". The bottom status bar displays the path "/Documents/posit/positron-workshop-project" and the version "Quarto 1.8.11".



# Navigation



Command:  
**Go to Symbol in Editor**



New > New File...

The screenshot shows the Quarto Document interface. On the left is a code editor with R code for a Quarto document. The main area displays a section titled "Meet the penguins" with three penguins labeled CHINSTRAP!, GENTOO!, and ADÉLIE!. Below this is a note about the palmerpenguins package. At the bottom, there's a plot placeholder and a terminal window showing the command to preview the document.

```
title: "Hello, Quarto"
format:
 html: default
 pdf: default

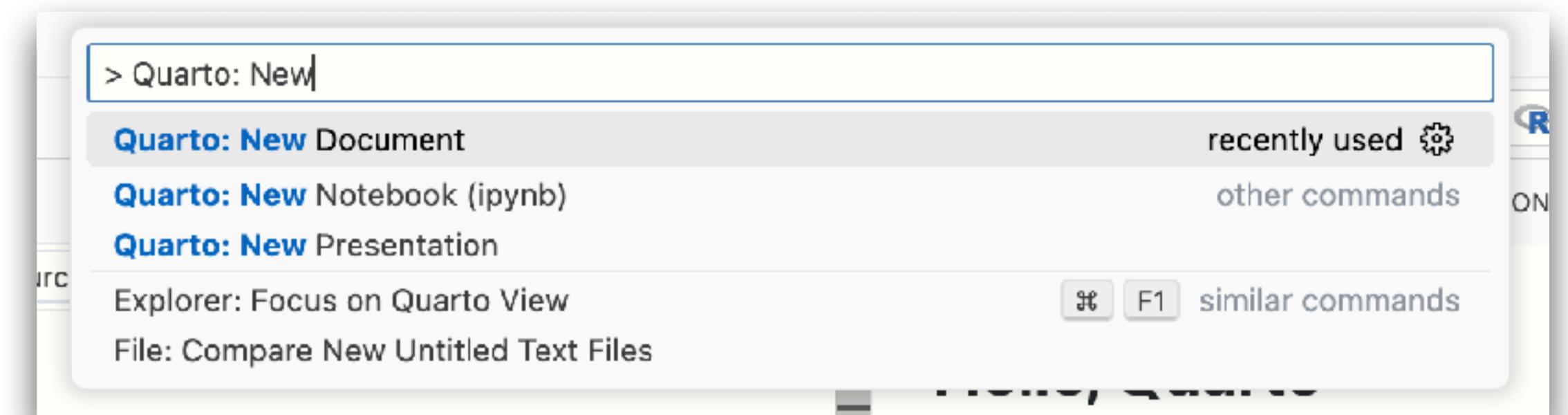
#| label: load-packages
#| includes: false
library(tidyverse)
library(palmerpenguins)

Meet Quarto

Quarto enables you to weave together content and executable code
into a finished document. To learn more about Quarto see chtr.net
CONSOLE TERMINAL Quarto Preview + ... - X O
posit/positron-workshop-project $ quarto preview /Users/charlottewickham/Documents/posit/positron-workshop-project/hello.qmd --no-browser --no-watch-inputs
default-image-extension: png
variables: {}
metadata
 document-css: false
 link-citations: true
 date-format: long
 lang: en
 title: Hello, Quarto
Output created: hello.html
Watching files for changes
```

Quarto Document

## Command: Quarto: New Document

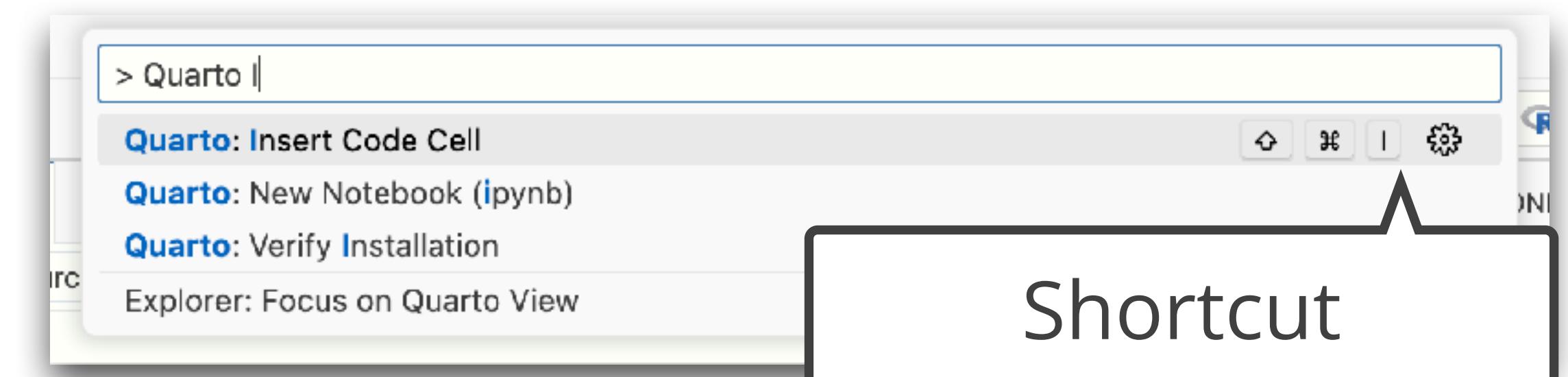


A screenshot of a code editor window. At the top, there are two tabs: 'hello.qmd' and 'Untitled-1'. Below the tabs is a toolbar with buttons for 'Preview', 'Render on Save', 'Source' (which is selected), and 'Visual'. To the right of the toolbar is a button labeled 'Insert Code Cell' with a small icon. The main area contains the following code:

```
1 ---
2 title: "Untitled"
3 format: html
4 ---
5
6
```

The line 'Insert Code Cell' is highlighted with a black rectangular box.

Command:  
**Quarto: Insert Code Cell**



Shortcut

# What's different?

- No inline preview of code output (aka **Chunk Output Inline** in RStudio)
- No push button publishing except to Posit Connect via [Posit Publisher](#) extension
- RMarkdown (.Rmd) files preview via Quarto.  
Command palette: **R: Render with Document RMarkdown**

# Updating Quarto

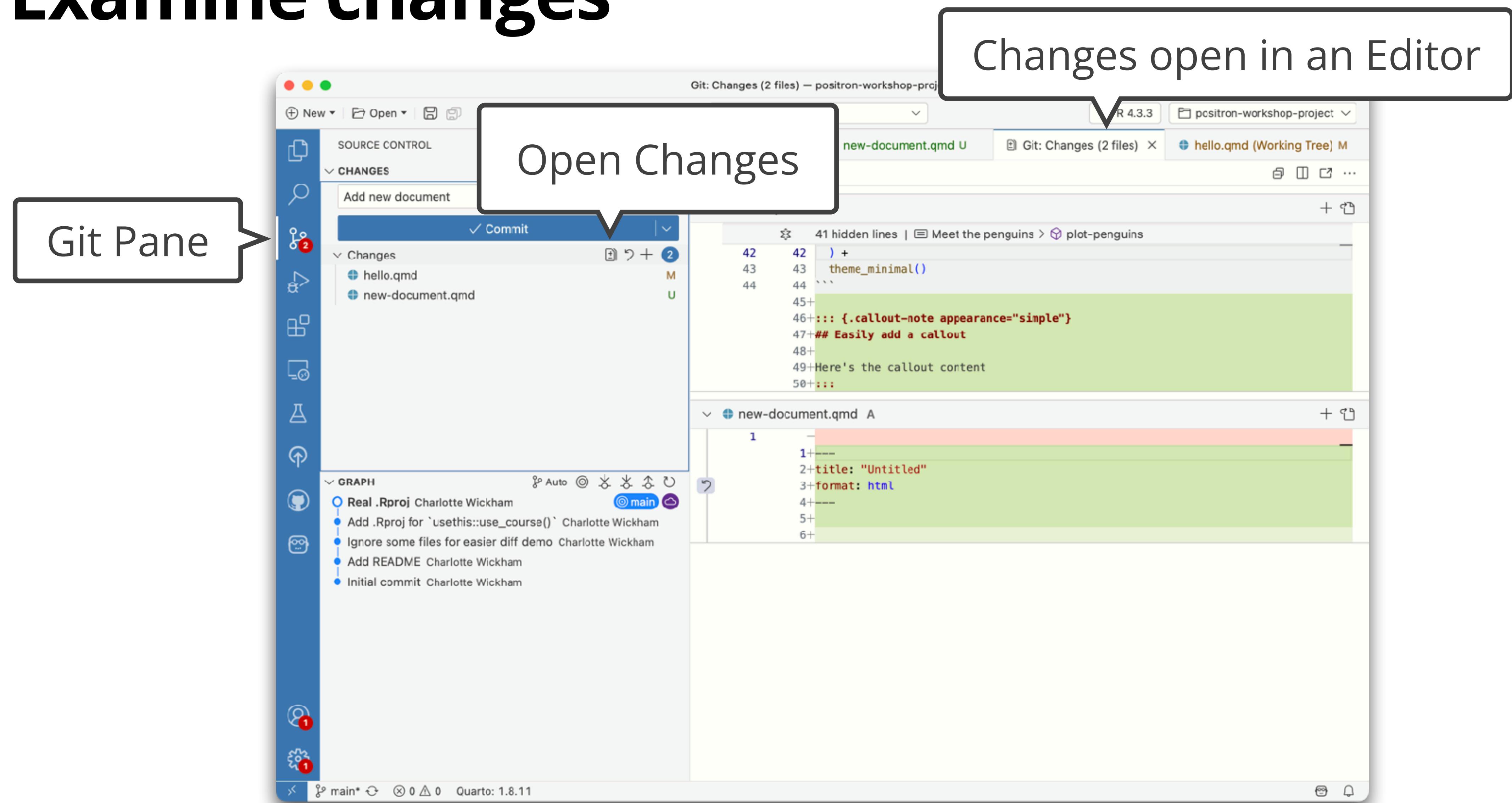
- **Strategy 1:** Rely entirely on Positron's bundled Quarto
  - Get updates as Positron is updated (⚙️ Setting: Update: Auto Update)
  - Currently, no easy way to use this version outside of Positron
- **Strategy 2:** Manage Quarto outside of Positron
  - Update manually from quarto.org
  - Positron will prefer the manually installed version, even if it is older
  - You can specify a specific Quarto with ⚙️ Setting: Quarto: Path

# Demo

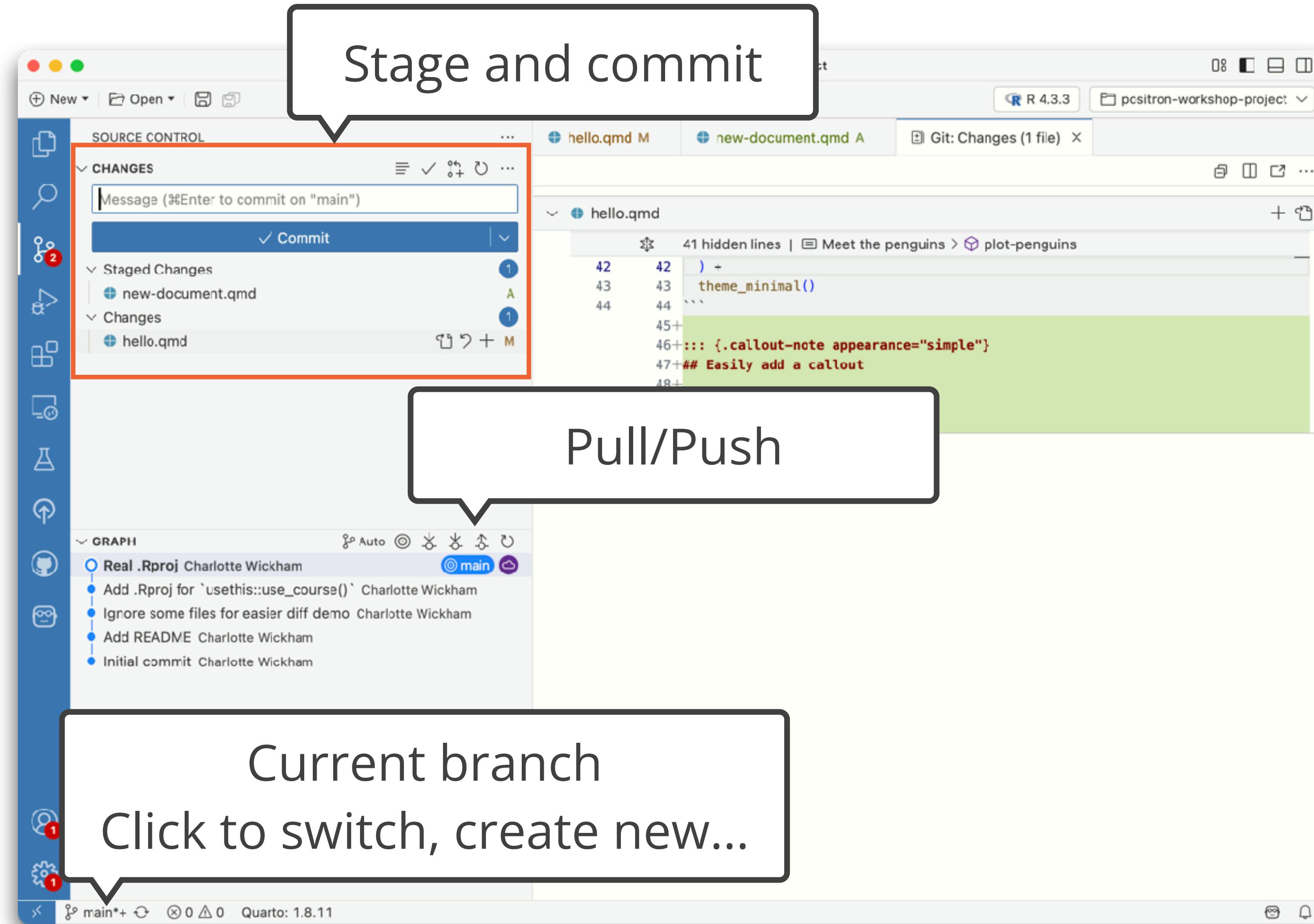
## Git Pane

- Changes Pane
  - **Open Changes** closest to RStudio's diff
  - Changes open in Editor
  - Add, Commit
- Graph Pane
  - Pull/Push
  - Like RStudio's History view
- Current Branch
  - Click to get branch actions

# Examine changes



# Git workflow



# Learn more

**Quarto docs:** Guide > Tools > Positron

<https://quarto.org/docs/tools/positron/>

**VS Code docs:** Source Control

<https://code.visualstudio.com/docs/sourcecontrol/overview>