



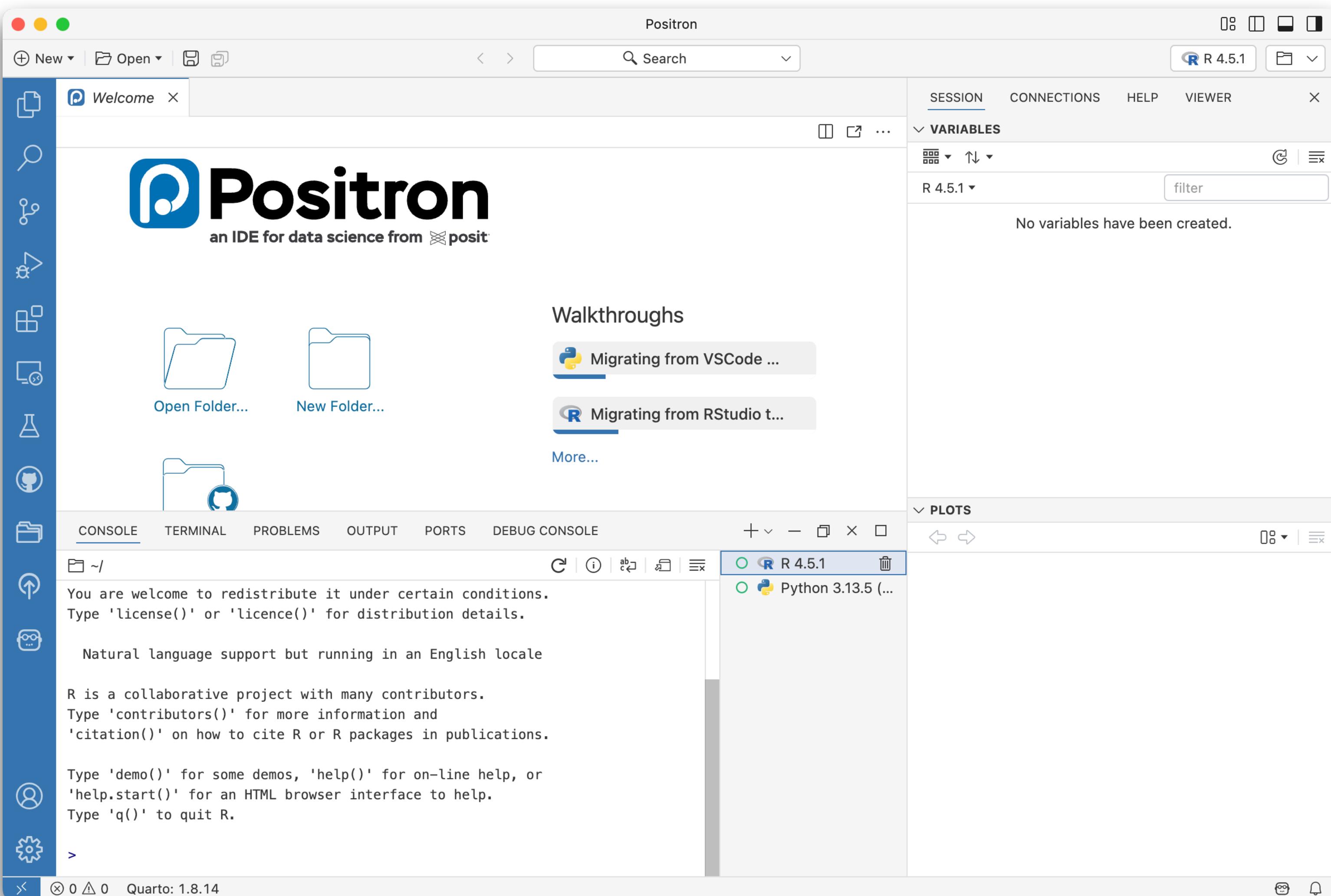
# Exploring Positron

Part of "Doing data science in Positron" workshop

Posit Software, PBC



# You should be here

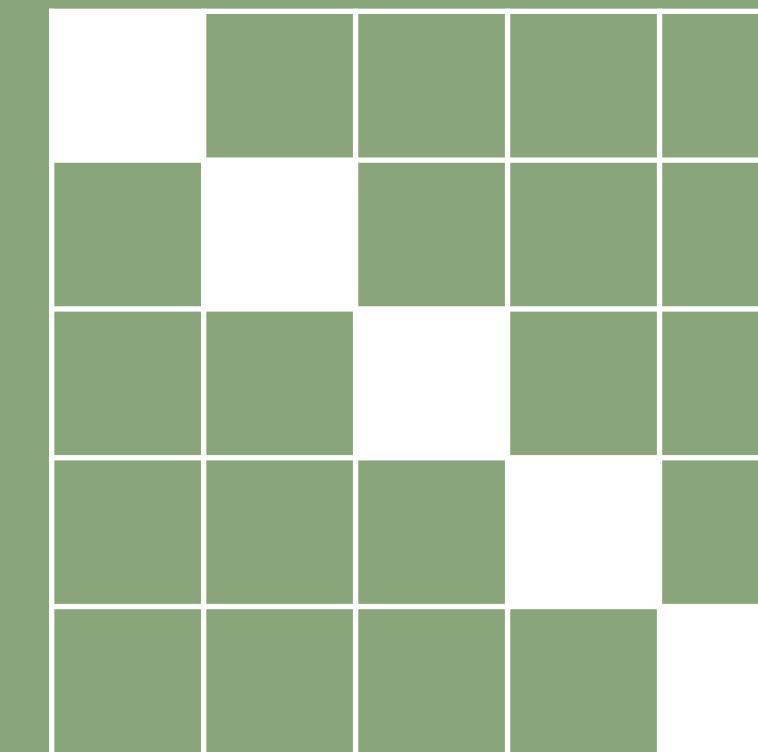
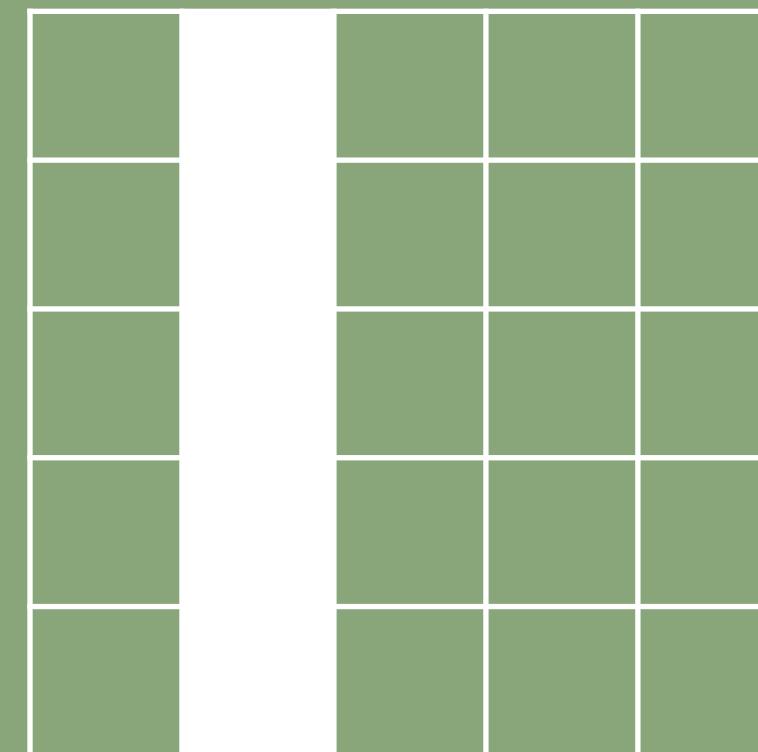
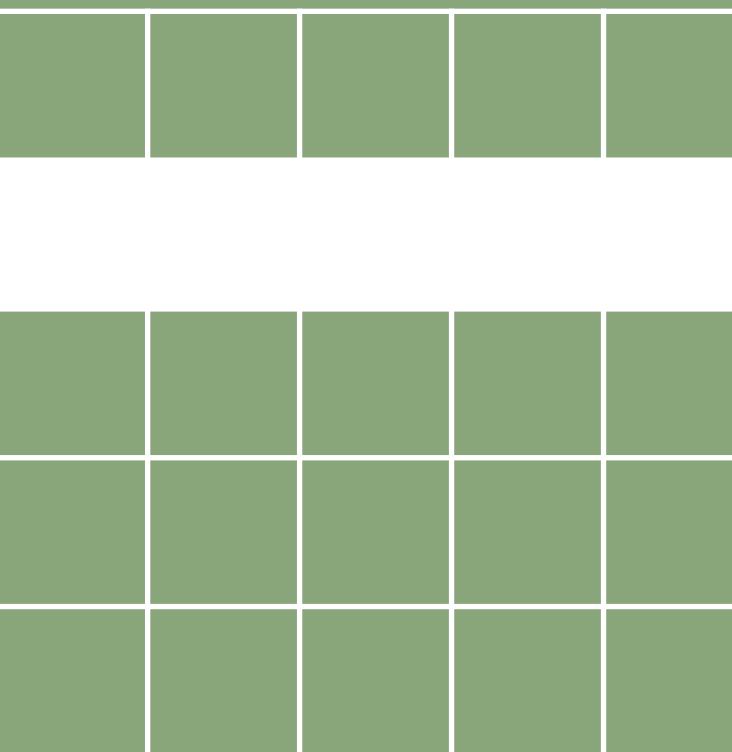


# Your turn

## Positron Bingo!

10<sub>m</sub> 00<sub>s</sub>

- Your "bingo" card has things for you to **find**
  - **Data Explorer** cells: first run `View(mtcars)` in the Console
- Complete 5 in a line and call out "BINGO!"



# Your turn

## Example Card

A way to see and edit two files side by side	The shortcut to send R code to the Console	Another way to open the Command Palette	A way to open a specific file by its name	Data Explorer: the number of cars where cyl is 4
A terminal, i.e. "a shell"	The shortcut to insert "<--"	The button that opens your console history	The button that saves a plot	A way to open a new Positron window
How to change the IDE theme	The "Find and Replace" dialog box	FREE	An RStudio pane that isn't in Positron	How to change the IDE zoom level
Where Git information and actions live	The setting that enables RStudio shortcuts	The button to restart the R Console	A way to open a new R script file	A prompt to "Open a folder"
The version of R running in the Console	The current working directory of the Console	A way to start another Console	The version of Positron you're running	The shortcut for "Help: Show help at cursor"

What's the same?



positron-workshop-project - RStudio

Environment History Connections Tutorial

Data

- category\_perform... 3 obs. of 7 variables
- sales\_data 250 obs. of 6 variables

Sales Amount Distribution by Product Category  
January - December 2023

The box plot displays the distribution of sales amount for three product categories: Clothing, Electronics, and Furniture. The y-axis represents Sales Amount (\$) from \$0 to \$800. The x-axis represents Product Category. The plot shows that Clothing has the highest median sales (~\$550), Electronics has a median around \$450, and Furniture has the lowest median sales (~\$400). All categories show significant variability.

```
43 # Visualizing sales by product category
44 ggplot(
45   sales_data,
46   aes(x = product_category, y = amount, fill = product_category)
47 ) +
48   geom_boxplot(alpha = 0.7) +
49   geom_jitter(width = 0.2, alpha = 0.4) +
50   labs(
51     title = "Sales Amount Distribution by Product Category",
52     subtitle = "January - December 2023",
53     x = "Product Category",
54     y = "Sales Amount ($)"
55   ) +
56   theme_minimal() +
57   scale_fill_brewer(palette = "Set1") +
58   scale_y_continuous(labels = scales::dollar_format())
59
60
```

# Positron

explore.R -- positron-workshop-project

VARIABLES

R 4.4.3

DATA

- category\_perform [3 rows x 7 columns] <tbl\_df>
- data [100 rows x 7 columns] <tbl\_df>
- data\_summary [3 rows x 6 columns] <tbl\_df>
- data\_wide [10 rows x 5 columns] <tbl\_df>
- sales\_data [250 rows x 6 columns] <tbl\_df>
- time\_data [12 rows x 2 columns] <tbl\_df>

PLOTS

Sales Amount Distribution by Product Category  
January - December 2023

The box plot displays the distribution of sales amount for three product categories: Clothing, Electronics, and Furniture. The y-axis represents Sales Amount (\$) from \$0 to \$800. The x-axis represents Product Category. The plot shows that Clothing has the highest median sales (~\$550), Electronics has a median around \$450, and Furniture has the lowest median sales (~\$400). All categories show significant variability.

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**R Studio**

**Write**

**Understand**

**Run**

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54   y = "Sales Amount ($)"
55 ) +
56 theme_minimal() +
57 scale_fill_brewer(palette = "Set1") +
58 scale_y_continuous(labels = scales::dollar_format())
59
60
```

Sales Amount Distribution by Product Category  
January - December 2023

Product Category: Clothing, Electronics, Furniture

Sales Amount (\$): \$0, \$250, \$500, \$750

```
+ ) +
+ geom_boxplot(alpha = 0.7) +
+ geom_jitter(width = 0.2, alpha = 0.4) +
+ labs(
+   title = "Sales Amount Distribution by Product Category",
+   subtitle = "January - December 2023",
+   x = "Product Category",
+   y = "Sales Amount ($)"
+ ) +
+ theme_minimal() +
+ scale_fill_brewer(palette = "Set1") +
+ scale_y_continuous(labels = scales::dollar_format())
>
```



**Positron**

**Write**

**Understand**

**Run**

```
42 category_performance
43
44 # Visualizing sales by product category
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48 ) +
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53   subtitle = "January - December 2023",
54   x = "Product Category",
55   y = "Sales Amount ($)"
56 ) +
57 theme_minimal() +
58 scale_fill_brewer(palette = "Set1") +
59 scale_y_continuous(labels = scales::dollar_format())
60
```

Sales Amount Distribution by Product Category  
January - December 2023

Product Category: Clothing, Electronics, Furniture

Sales Amount (\$): \$0, \$200, \$400, \$600, \$800

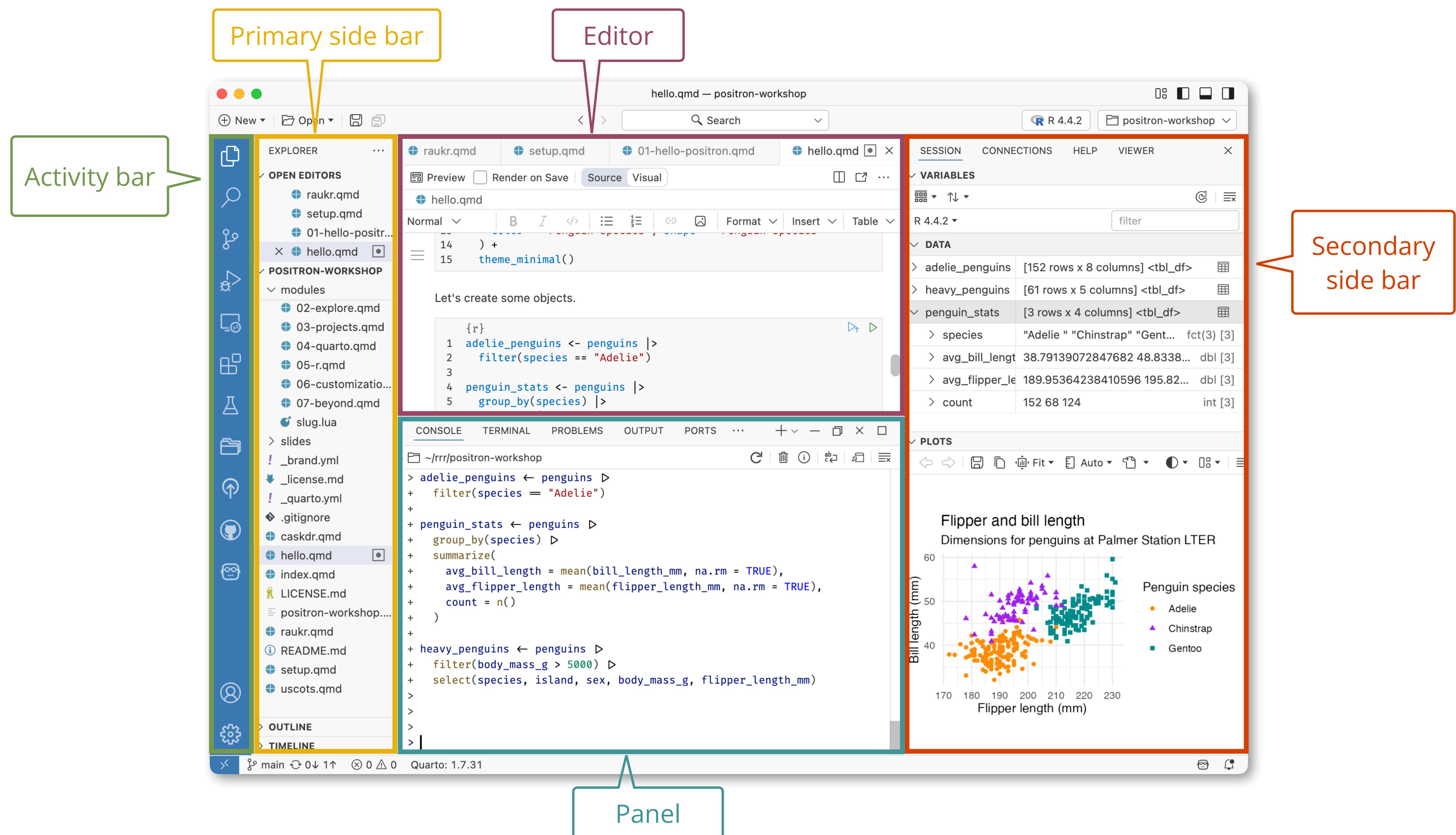
```
explore.R > ...
category_performance
43
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46   sales_data,
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58 scale_fill_brewer(palette = "Set1") +
59 scale_y_continuous(labels = scales::dollar_format())
60
```

CONSOLE TERMINAL PROBLEMS OUTPUT PORTS ...

```
~/posit/positron-workshop-project
+ geom_boxplot(alpha = 0.7) +
+ geom_jitter(width = 0.2, alpha = 0.4) +
+ labs(
+   title = "Sales Amount Distribution by Product Category",
+   subtitle = "January - December 2023",
+   x = "Product Category",
+   y = "Sales Amount ($)"
+ ) +
+ theme_minimal() +
+ scale_fill_brewer(palette = "Set1") +
+ scale_y_continuous(labels = scales::dollar_format())
>
```

Quarto: 1.8.4

Ln 60, Col 1 Spaces: 2 UTF-8 LF { } R { }



# Use your RStudio muscle memory

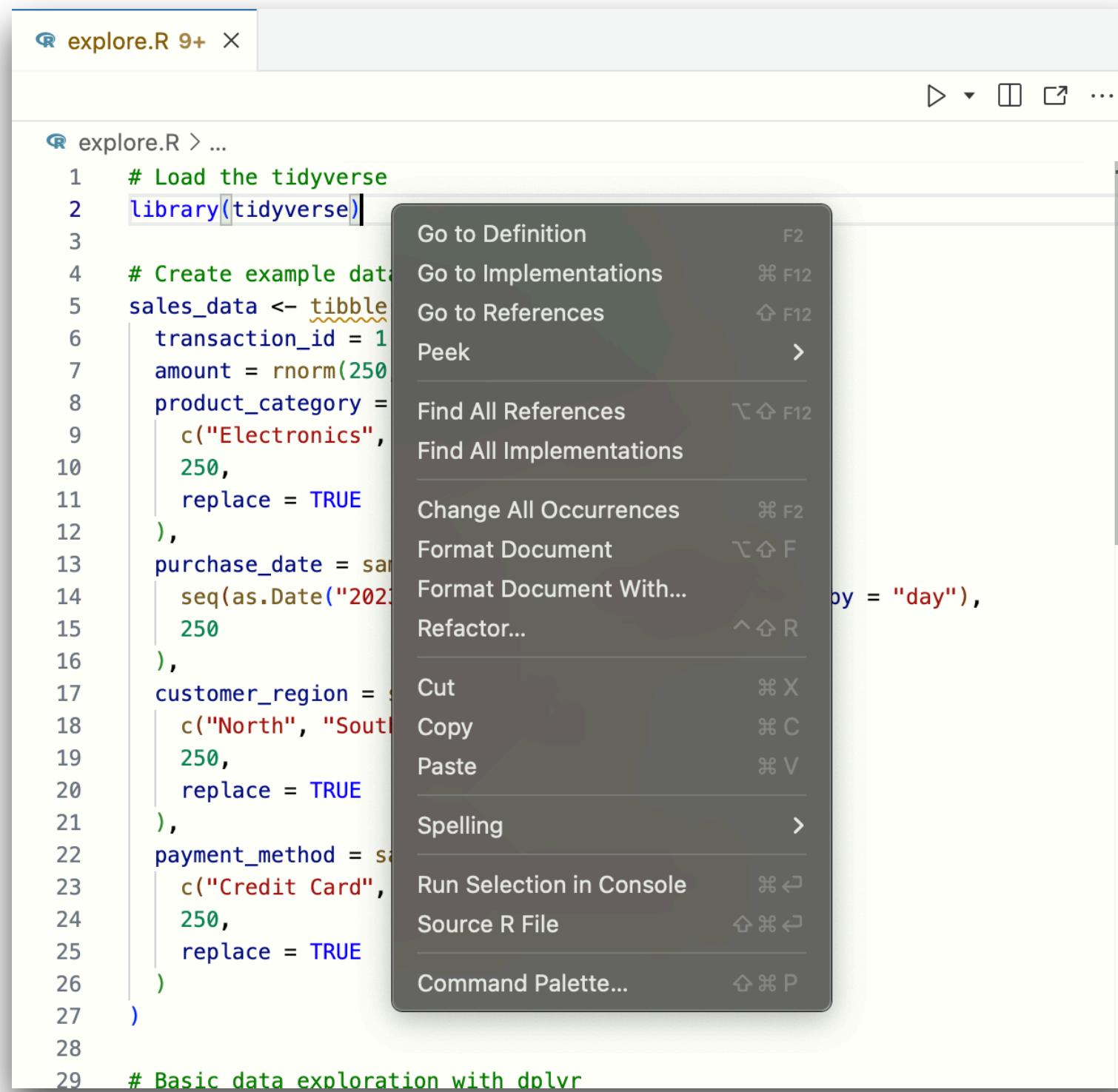
- New R File\*: Cmd/Ctrl + Shift + N
- Send Code to Console: Cmd/Ctrl + Enter
- Get Help at Cursor: F1
- Find: Cmd/Ctrl + F
- Find in Files: Cmd/Ctrl + Shift + F
- Restart R: Cmd/Ctrl + Shift + 0
- Navigate Console History: Cmd/Ctrl + ↑
- Completion: Tab

\*Enable Setting: RStudio Keybindings

# What's different?

# Less menus, more right-click

Editor

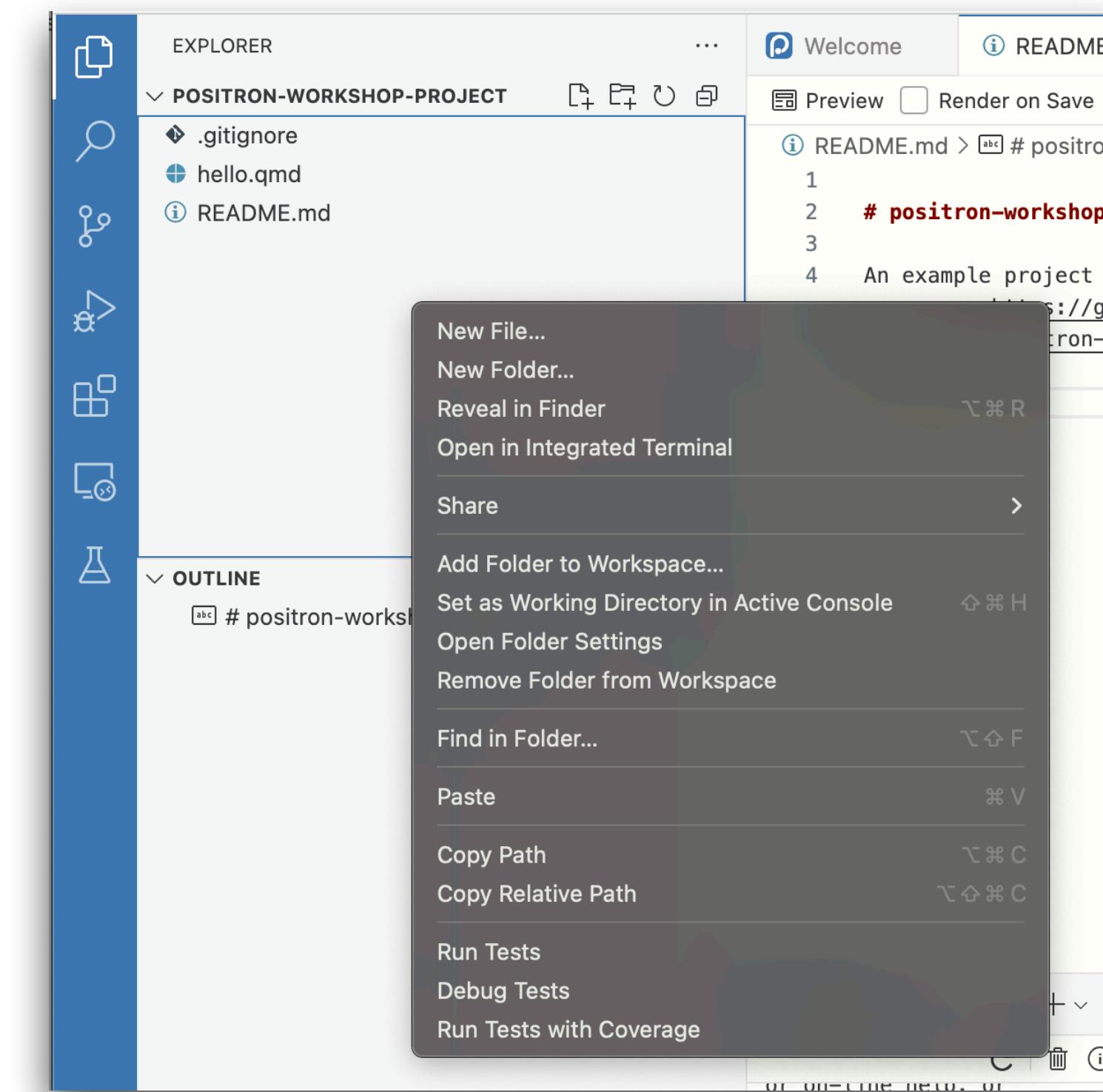


A screenshot of the VS Code Editor showing an R script named 'explore.R'. A context menu is open over the line 'library(tidyverse)'. The menu includes options like 'Go to Definition' (F2), 'Go to Implementations' (⌘ F12), 'Go to References' (F12), 'Peek' (⇧ F12), 'Find All References' (F12), 'Find All Implementations' (F12), 'Change All Occurrences' (⌘ F2), 'Format Document' (F12), 'Format Document With...' (F12), 'Refactor...', 'Cut' (⌘ X), 'Copy' (⌘ C), 'Paste' (⌘ V), 'Spelling' (F12), 'Run Selection in Console' (F12), 'Source R File' (F12), and 'Command Palette...' (F12).

```
explore.R 9+ 
1 # Load the tidyverse
2 library(tidyverse)
3
4 # Create example data
5 sales_data <- tibble(
6   transaction_id = 1:250,
7   amount = rnorm(250),
8   product_category =
9     c("Electronics", "Clothing", "Books", "Home Goods", "Sports & Outdoors", "Tech Accessories"),
10    250,
11    replace = TRUE
12  ),
13  purchase_date = sample(seq(as.Date("2023-01-01"), as.Date("2023-12-31")), 250,
14    replace = TRUE
15  ),
16  customer_region = sample(c("North", "South", "East", "West"), 250,
17    replace = TRUE
18  ),
19  payment_method = sample(c("Credit Card", "Debit Card", "Gift Card", "Cash On Delivery", "Digital Wallet"), 250,
20    replace = TRUE
21  )
22 )
```

# Basic data exploration with dplyr

(File) Explorer

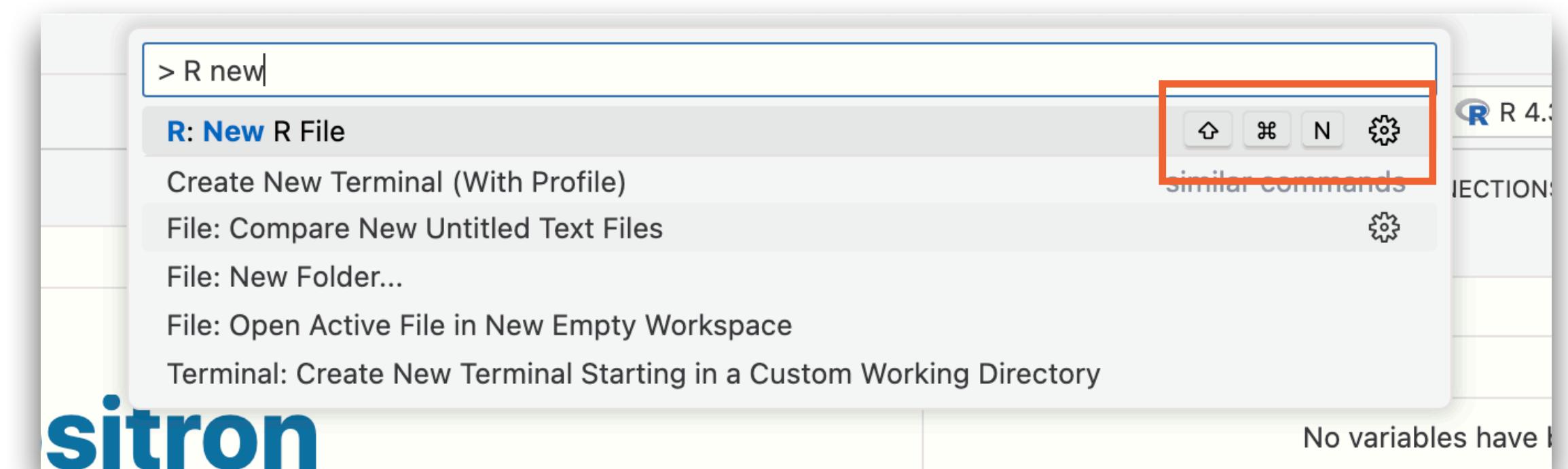


# Less clicks, more command palette

Almost everything in a menu or button has a command

Menu: **File > New File > R File**  
Command: **R: New R File**

Any command can be given a shortcut



# Rest of our time

- Organization
- Quarto
- R
- Customization
- Beyond