

Inference Studio QuickStart 2

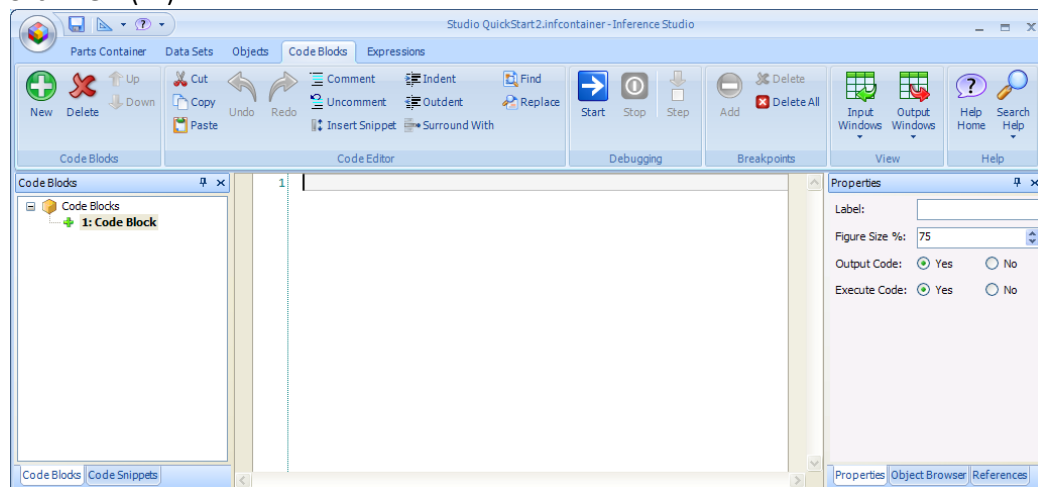
Debug Code with Inference Studio

This Inference Studio QuickStart shows you how to:

- Set breakpoints in your R code.
- Examine the contents of objects in the R workspace at a given point in code execution.
- Use Edit-and-Continue to fix coding errors on-the-fly during debugging.

1. Add R code to your project

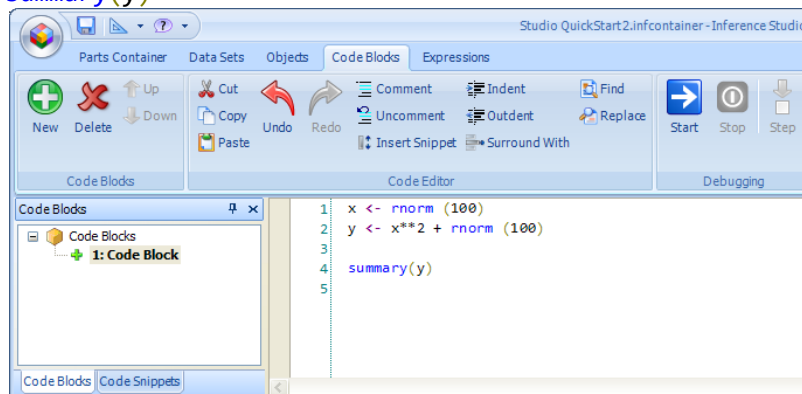
1. Open or create an Inference Studio document.
2. Click the Code Blocks tab.
3. Click **New** ('+').



4. Add the following lines of code:

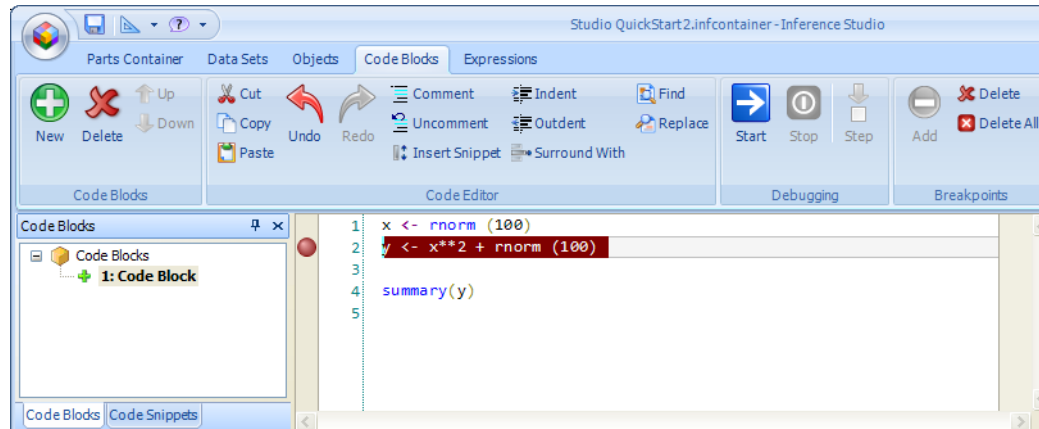
```
x <- rnorm (100)
y <- x**2 + rnorm (100)
```

```
summary(y)
```

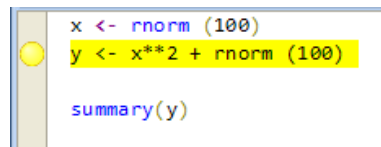


2. Add a breakpoint

1. To add a breakpoint between lines 1 and 2, click anywhere on line 2. Then, in the **Breakpoints** section of the ribbon, click **Add**. (Alternatively, click in the gray margin to the left of the line of code.)



2. In the **Debugging** section of the ribbon, click **Start** to run the code.
3. The code execution will stop at the line with the breakpoint. The line will be highlighted in yellow:

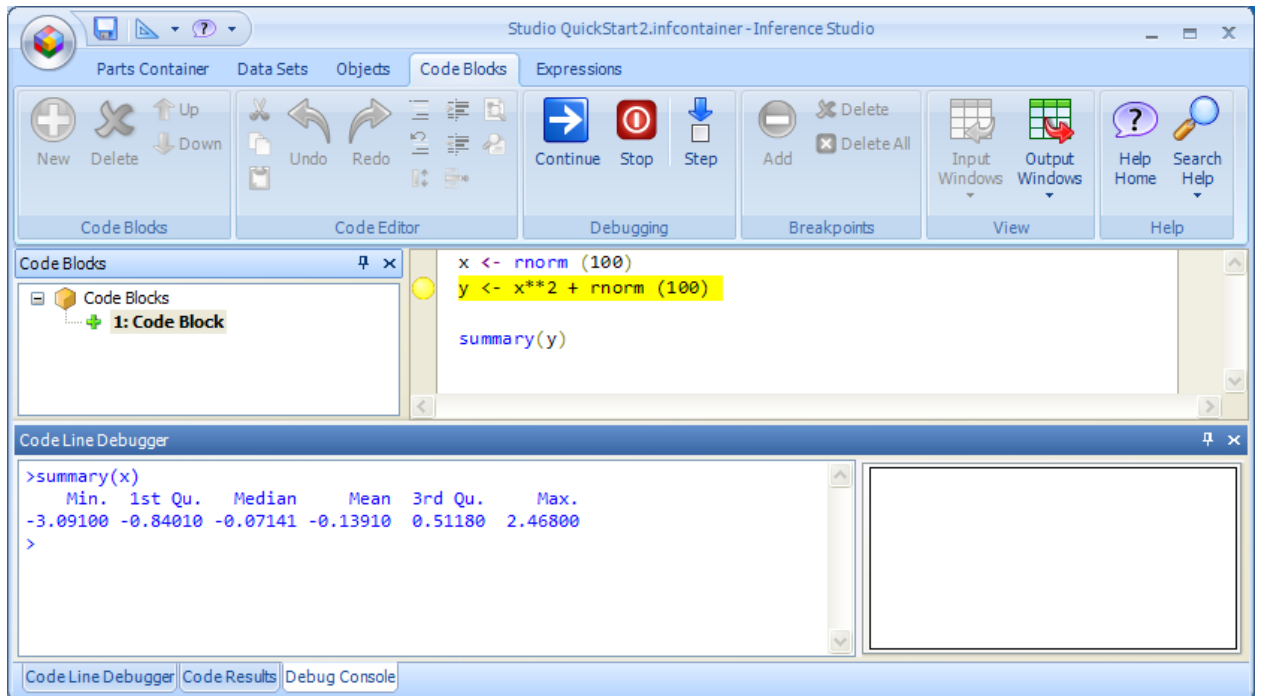


3. Examine R workspace contents during code execution

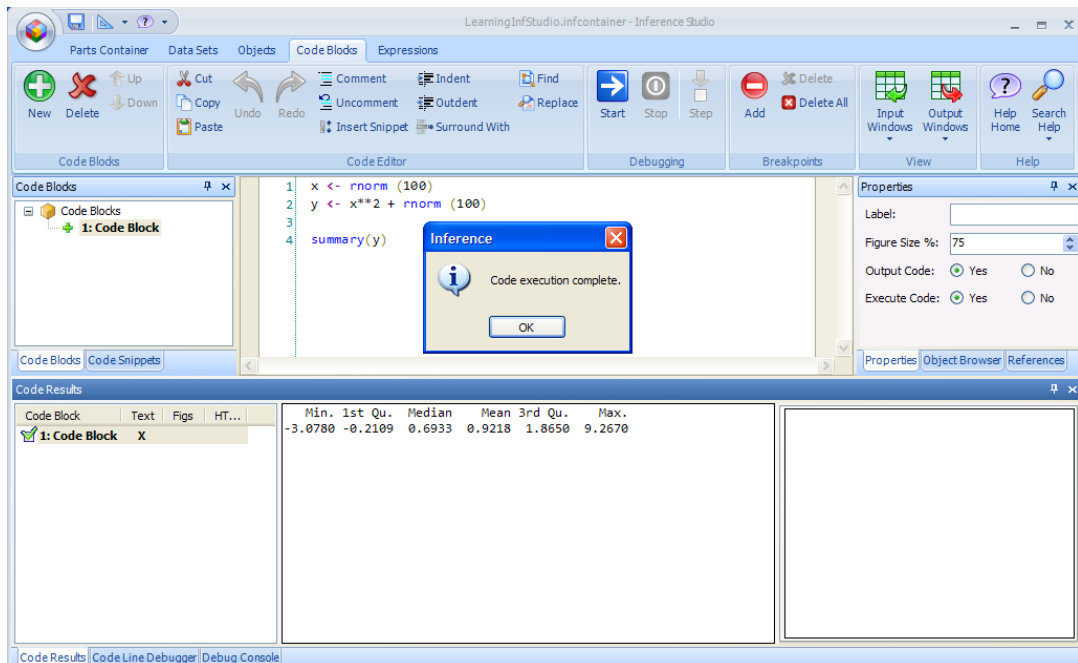
1. When the code execution is stopped at a breakpoint, you can use the Debug Console to examine specific elements of the R workspace.

Notice that by default, the Code Line Debugger, Code Results, and Debug Console task panes are arranged as tabs in the bottom section of the Inference Studio window. Individual task panes can be rearranged to customize the Inference Studio interface. Simply click the title bar for the task pane and drag it to the desired location.

- For this example, type **summary(x)** at the Debug Console. The results will be displayed:



- In the Debugging section of the ribbon, click **Continue** to resume the code execution.
- When the code execution is complete, the results will appear in the **Code Results** window.



- Click OK.

- To remove the breakpoint, click anywhere in line 2. Then, in the **Breakpoints** section of the ribbon, click **Delete**. Alternatively, click in the margin to the left of the code. The red dot will be removed.

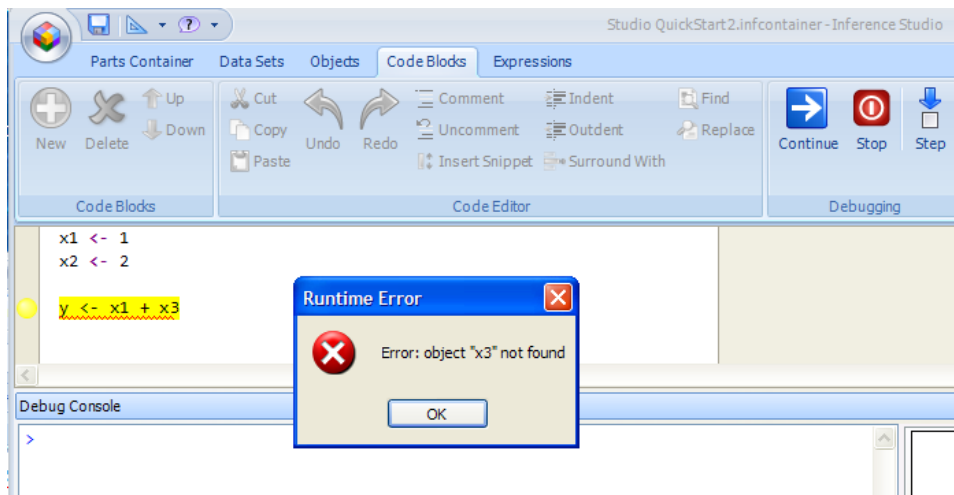
4. Interactively debug R code using edit-and-continue

When you run R code in Inference Studio, the code execution will stop at breakpoints and whenever an error is encountered. You can use the **Code Line Debugger** task pane to edit R code on the fly. For example, you can fix an error and continue on with the new code.

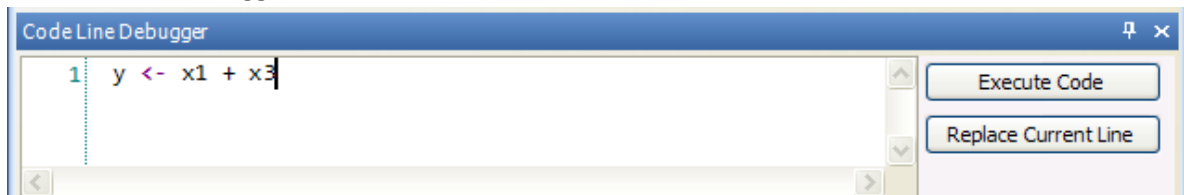
- In the Code Blocks menu, click **New**.
- In Code Block Editor, add the following lines of code:

```
x1 <- 1
x2 <- 2
y <- x1 + x3
```

- Click **Start** or press **F5** to run the code. The code execution will halt when the error is reached:



- Click **OK**.
- The Code Line Debugger shows the line of code where the execution halted.



- Fix the code by replacing **x3** with **x2**. Then, click **Replace Current Line**.
- In the Debugging section of the ribbon, click **Continue**.