

Another option is to send text to the console at certain points during execution.

The can be accomplished using *cat()*, printing to standard error *stderr()*.

```
cat(file=stderr(), "drawing histogram with", input$bins, "bins", "\n")
```

Setting breakpoints: Click to the left of the line where you want to set a breakpoint. This will pause execution just prior to this line. You can then step through the code one line at a time and inspect elements of the environment.

Only work on the server side.

```
output$distPlot <- renderPlot({
    # generate bins based on input$bins from ui.R
    x <- faithful[, 2]
    bins <- seq(min(x), max(x), length.out = input$bins + 1)
    # draw the histogram with the specified number of bins
    hist(x, breaks = bins, col = 'darkgray', border = 'white')
}
</pre>
```

browser(): Interrupt the execution of an expression and allow the inspection of the environment where browser was called from.

Lets you inspect the current state of objects in the environment and see if anything is amiss.

Can also step through execution one line at a time.

Can be used in combination with and actionButton and an observeEvent().