



## Quiz 1



5/5 questions correct

Quiz passed!

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1.

Consider the following code for the cars data set

```
library(manipulate)
myPlot <- function(s) {
  plot(cars$dist - mean(cars$dist), cars$speed - mean(cars$speed))
  abline(0, s)
}
```

This function plots distance versus speed, each de-meaned and an associated line of slope  $s$ .

Which of the following code will make a manipulate plot that creates a slider for the slope?



`manipulate(myPlot(s), s = slider(0, 2, step = 0.1))`

**Well done!**



`manipulate(myPlot(s), x.s = slider(0, 2, step = 0.1))`



`manipulate(myPlot, s = slider(0, 2, step = 0.1))`



☐

```
manipulate(myPlot(s), slider = x(0, 2, step = 0.1))
```



2.

Which of the following code uses the **rCharts** package to create a sortable and searchable data table for the **airquality** data set? Assume the **rCharts** package and the **airquality** data set have already been loaded into R.

☒

```
dTable(airquality, sPaginationType = "full_numbers")
```

Well done!

☐

```
airquality
```

☐

```
head(airquality)
```

☐

```
d <- data.frame(airquality, stringsAsFactors = FALSE)print(d)
```



3.

A basic shiny data product requires:

☒

A **ui.R** and **server.R** file or a **A server.R** file and a directory called **www** containing the relevant html files.

Well done!

☐

A **shiny.R** file.

☐

A **ui.R** file only.

☐

A **server.R** file only.



4.

What is incorrect about the followig syntax in `ui.R`?

```
library(shiny)
shinyUI(pageWithSidebar(
  headerPanel("Data science FTW!"),
  sidebarPanel(
    h2('Big text')
    h3('Sidebar')
  ),
  mainPanel(
    h3('Main Panel text')
  )
))
```

- ☐ The `h3` command should be an `h2` command.
- ☒ Missing a comma in the sidebar panel

Well done!

- ☐ The `"Sidebar"` should say `"Sidebar text"`.
- ☐ The `h2` command has the wrong arguments.



5.

Consider the following code in `ui.R`

```
shinyUI(pageWithSidebar(
  headerPanel("Example plot"),
  sidebarPanel(
    sliderInput('mu', 'Guess at the mu', value = 70, min = 60, max = 80,
step = 0.05,) ),
  mainPanel(
    plotOutput('newHist')
  )
))
```

And the following `server.R` code.

```
library(UsingR)
data(galton)

shinyServer(
  function(input, output) {
    output$myHist <- renderPlot({
      hist(galton$child, xlab='child height', col='lightblue', main
='Histogram')
      mu <- input$mu
      lines(c(mu, mu), c(0, 200), col="red", lwd=5)
      mse <- mean((galton$child - mu)^2)
      text(63, 150, paste("mu = ", mu))
      text(63, 140, paste("MSE = ", round(mse, 2)))
    })
  }
)
```

Why isn't it doing what we want?

- ☐ It should be `mu <- input$mean` in server.R
- ☐ The phrase "Guess at the mu value" should say "mean" instead of "mu"
- ☐ The limits of the slider are set incorrectly and giving an error.
- ☒ The server.R output name isn't the same as the plotOutput command used in ui.R.

**Well done!**

