

R Markdown testbed

PSY 525

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This is a Heading 1

This is a Heading 2

This is a Heading 3

Lists

Not enumerated

- An item
 - A nested item with **boldface**
 - * A doubly-nested item with *italics*
- Another item with some ~~text stricken out~~
- URL: Penn State Home

Enumerated

1. An enumerated item
 - A nested item
2. A second enumerated item
 - a. A nested item with a footnote ¹ marker. Look for the text at the end of the document.
 - b. A second nested item. See how alphabetical enumerated lists work like you'd expect.

Block quotation

Four score and seven years ago, some famous President spoke infamous words that would live on throughout history. These words are famous enough that I want to highlight them with a block quote.

¹Here is the footnote text. Note that it ends up at the end of the document.

Make some data

```
x = rnorm(n = 100, mean = 0, sd = 1) #  $N(0, 1)$   
y = rnorm(n = 100, mean = 2, sd = 0.5) #  $N(2, 0.5)$ 
```

Summarize

```
summary(x)
```

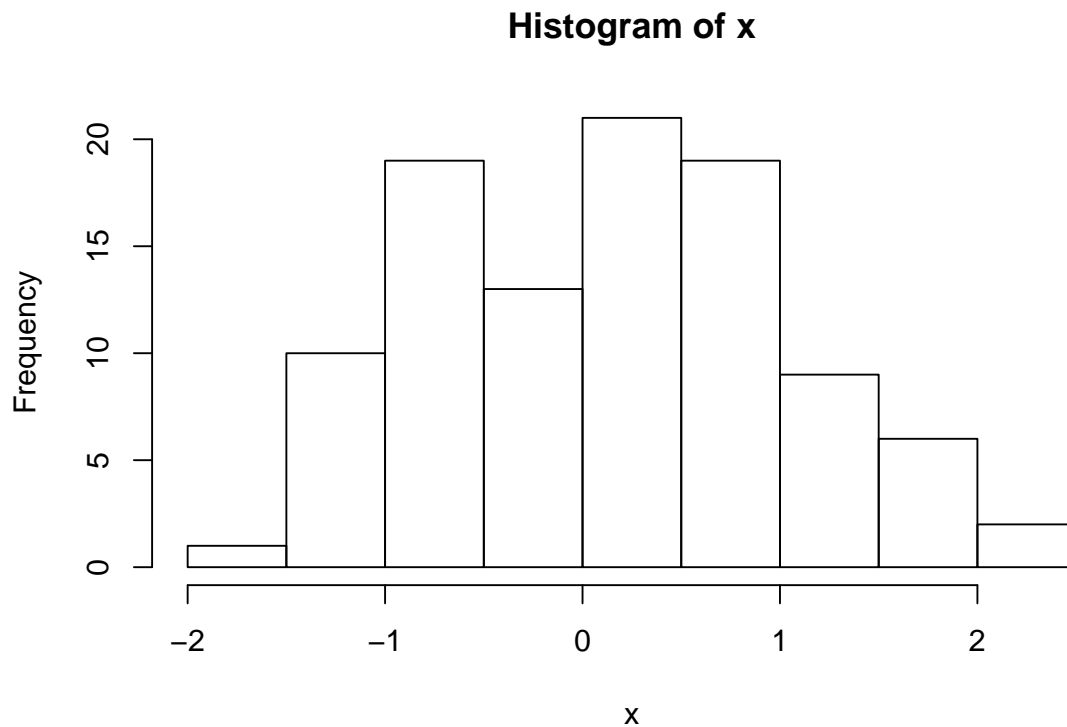
```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   
## -1.7199 -0.6222  0.2658  0.1589  0.7511  2.0952
```

```
summary(y)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   
##  0.8085  1.7071  2.0136  2.0436  2.4124  3.3837
```

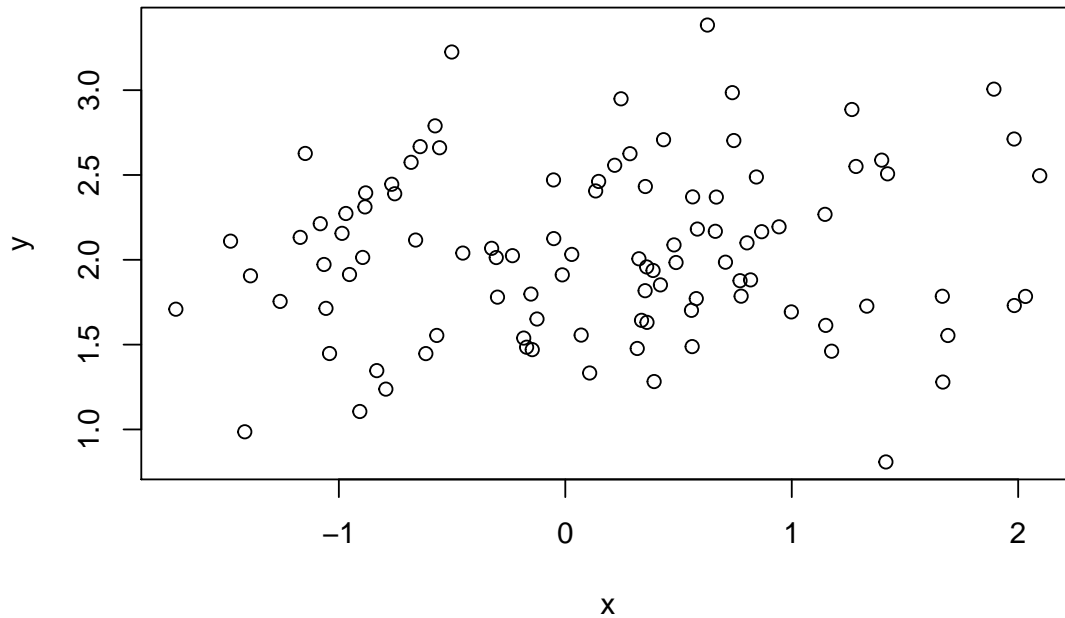
Histogram

```
hist(x)
```



Plot

```
plot(x,y)
```



Embed figures or videos

Some of these methods work better than others with a particular output format.

From the web using `knitr::include_graphics()`.

The `html_document` format is fine with using the URL as the input to `knitr::include_graphics()`, but the `pdf_document` format seems to want a local file path, hence the use of `download.file()`.

```
download.file("https://nyu.databrary.org/party/6/avatar", 'img/rog.png', mode = 'wb')
knitr::include_graphics("img/rog.png")
```



Figure 1: Rick's pic from Databrary

From a local file using HTML

From a local file using `knitr::include_graphics()`

```
knitr::include_graphics("img/sleic.jpg")
```



From a local file using Markdown syntax



Figure 2: SLEIC

From YouTube

Printing values from R

```
summ.x = summary(x)
summ.y = summary(y)
names(summ.x) # Figure out variable names for indexing
```

```
## [1] "Min."    "1st Qu." "Median"  "Mean"
## [5] "3rd Qu." "Max."    "
```

Index by variable name: X lies within the range of [-1.7198644, 2.0952016].

Index by numeric index: The (y-x) difference in means is 1.8846229.

Calculate and report: The correlation between x and y is 0.0967532.

Math equations

$$e = mc^2$$

Parameterized reports

My name is Steve

My quest is to find the grail

My favorite color is blue

Footnotes