Simple document

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I'm an R Markdown document!

Section 1: First code chunk

Here's a **code chunk** that samples from a *normal distribution*:

```r
samp = rnorm(100)
length(samp)
```
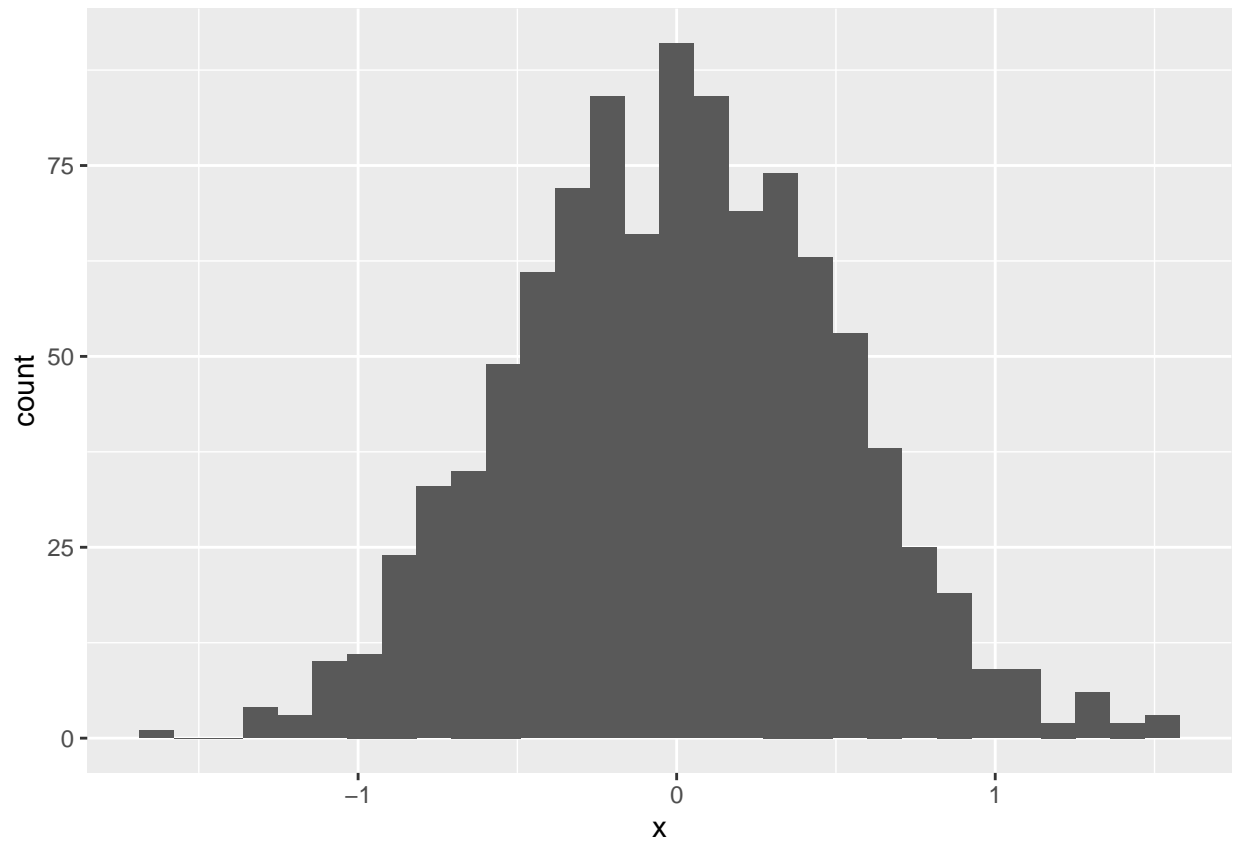
Section 2: Make a plot

This code is borrowed from last lecture; it creates a data frame from plotting.

```r
plot_df =
  tibble(
    x = rnorm(1000, sd = 0.5),
    y = 1 +2 * x + rnorm(1000),
  )
```

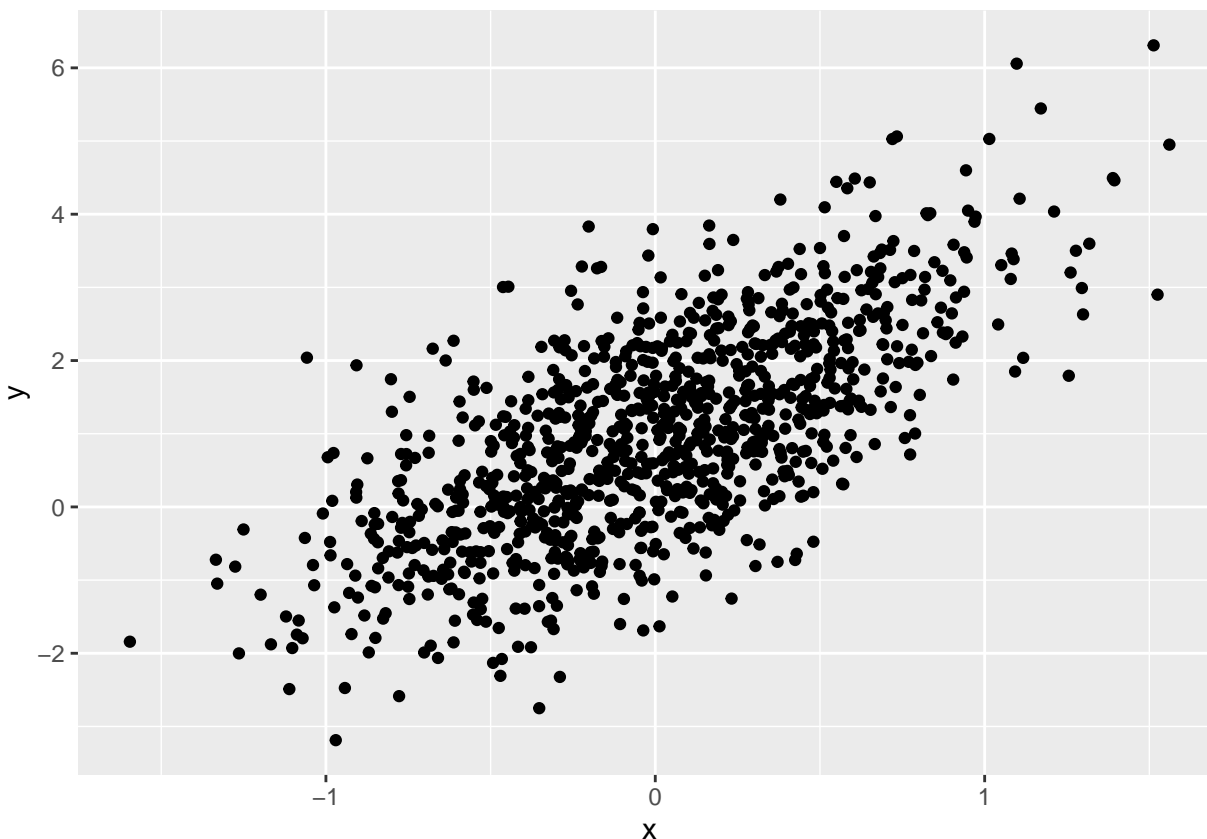Next up is a histogram od the x variable in `plot_df`

```r
ggplot(plot_df, aes(x = x)) + geom_histogram()
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

Lastly, I'll do a scatterplot

```
ggplot(plot_df, aes(x = x, y = y)) + geom_point()
```

here's a list:

- this is the first list thing
- here's another list item

Section 3: Learning assessment!

This code chunk should create a dataframe comprised of: a numeric variable containing a random sample of size 500 from a normal variable with mean 1; a logical vector indicating whether each sampled value is greater than zero; and a numeric vector containing the absolute value of each element.

```
la_df = tibble(
    num_samp = rnorm(500, mean = 1),
    log_vec = num_samp > 0,
    abs_val = abs(num_samp)
    )

ggplot(la_df, aes(x = abs_val)) + geom_histogram()
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```
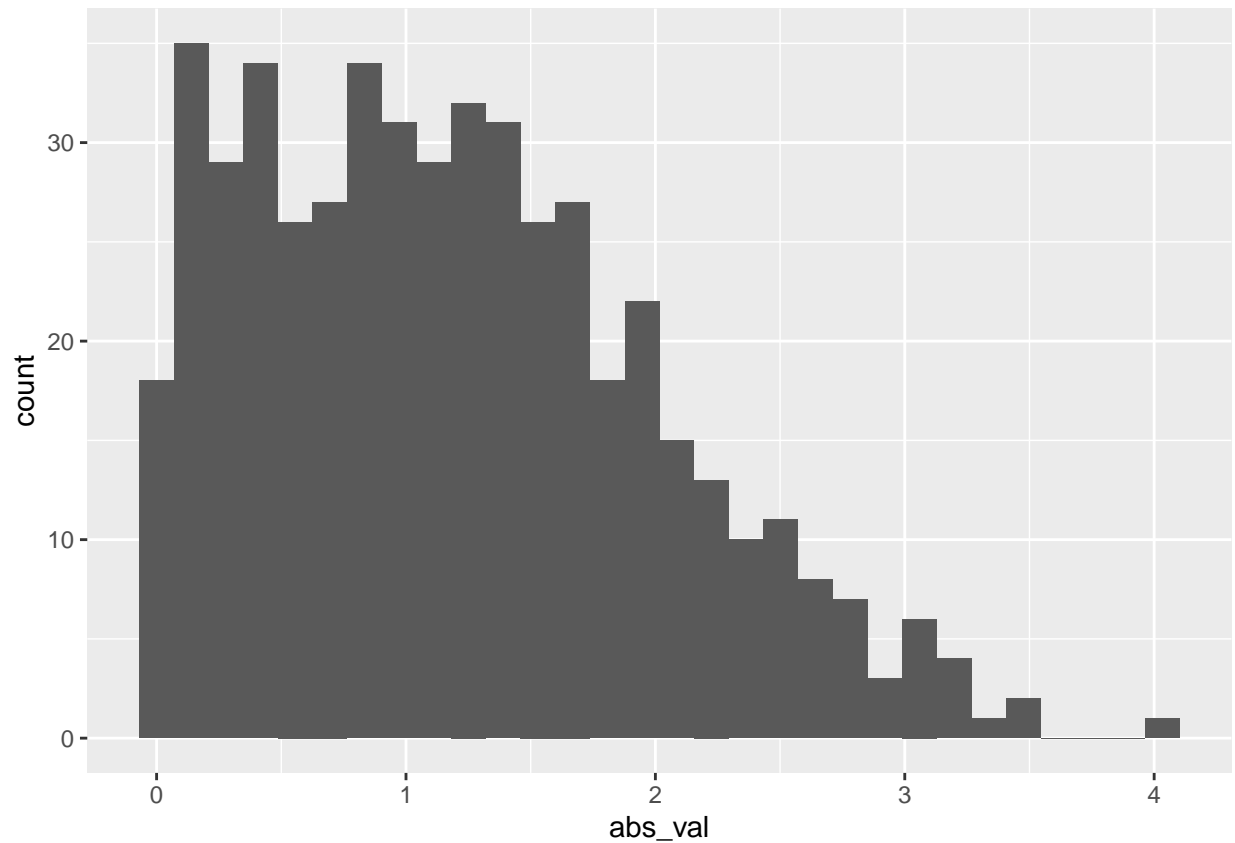
Section 4: Text formatting examples

Text formatting

italic or *italic* **bold** or **bold** `code` superscript^2 and subscript$_2$

Headings

1st Level Header

2nd Level Header

3rd Level Header

Lists

- Bulleted list item 1
- Item 2
    - Item 2a
    - Item 2b

1. Numbered list item 1
2. Item 2. The numbers are incremented automatically in the output.

Tables

First Header	Second Header
Content Cell	Content Cell
Content Cell	Content Cell