Module2 - RMarkdown Document 1

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This is a level 1 header

R Markdown

This is a level 3 header

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

Here is a link to GOOGLE

Here is a word in **bold** and another word in **bold**.

Here is a word in *italics* and another word in *italics*.

when we comoile our document, we are using the `rmarkdown` package.

Here are some example R commads:

```
2+2
mean(c(1,2,3,4,5))
```

Here is an example of a non-numbered list:

- Breakfast
    - food
        * eggs
        * toast
        * bacon
    - drink
        * apple juice
- Lunch
    - taco
- Dinner
    - baked chicken
    - broccoli
    - rice

Here is an example of a non-numbered list:

1. Breakfast
    a. food
        i. eggs
        ii. toast

   iii. bacon
  b. drink
    i. apple juice

 2. Lunch
  a. taco

 3. Dinner
  a. baked chicken
  b. broccoli
  c. rice

Here is an example of blockquote:

> This is a block quote. This paragraph has two lines.
>
> 1. This is a list inside a block quote.
> 2. Second item.

Here is an example of nested blockquote:

> This is a block quote. This paragraph has two lines.
>
> > This text is nested

Here is an example of blockquote:

```
2+2
mean(c(1,2,3,4,5))
```

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```r
summary(cars)
```

```
##      speed           dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```
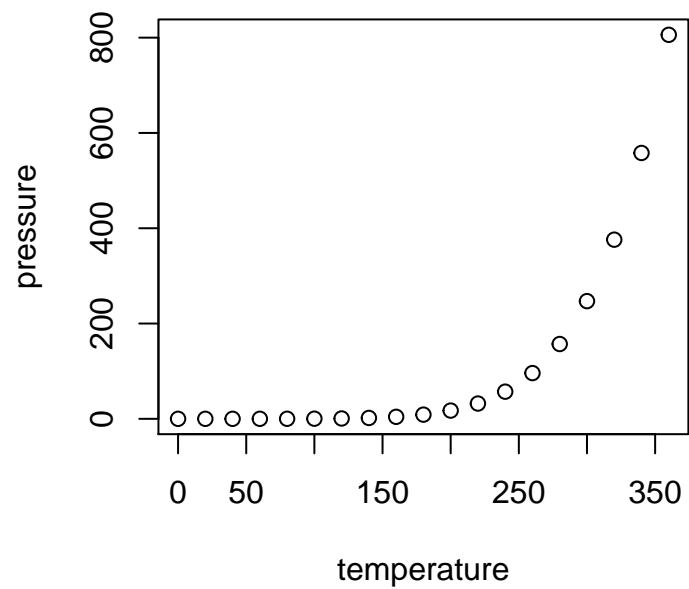
Including Plots

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```r
plot(pressure)
```

Insert Tables

with kable () function

```
knitr::kable(head(cars),
         caption ="Top 6 Rows of Cars Dataset")
```

Table 1: Top 6 Rows of Cars Dataset

speed	dist
4	2
4	10
7	4
7	22
8	16
9	10

```
knitr::kable(head(mtcars), digits =2, align = c(rep("l", 4), rep("c", 4), rep("r", 4)))
```

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160	110	3.90	2.62	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160	110	3.90	2.88	17.02	0	1	4	4
Datsun 710	22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.21	19.44	1	0	3	1

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Hornet Sportabout	18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
Valiant	18.1	6	225	105	2.76	3.46	20.22	1	0	3	1

with pandoc formats

Centered Header	Default Aligned	Right Aligned	Left Aligned
First	row	12.0	Example of a row that spans multiple lines.
Second	row	5.0	Here's another one. Note the blank line between rows.

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With `stargazer()` for summarizing regresion models and others (see `stargazer_models`, help page)

```r
library(stargazer, quietly = TRUE)

fit1 <- lm(mpg ~ wt, mtcars)
fit2 <- lm(mpg ~ wt + hp, mtcars)
fit3 <- lm(mpg ~ wt + hp + disp, mtcars)

stargazer(fit1, fit2, fit3, type = 'html',
          column.labels = c("model 1","model 2","model 3"),
          column.separate = c(1,1,1))
```

Dependent variable:

mpg

model 1

model 2

model 3

(1)

(2)

(3)

wt

-5.344***

-3.878***

-3.801***

(0.559)

(0.633)

(1.066)

hp

-0.032***

-0.031**

(0.009)

(0.011)

disp

-0.001

(0.010)

Constant

37.285***

37.227***

37.106***

(1.878)

(1.599)

(2.111)

Observations

32

32

32

R2

0.753

0.827

0.827

Adjusted R2

0.745

0.815

0.808

Residual Std. Error

3.046 (df = 30)

2.593 (df = 29)

2.639 (df = 28)

F Statistic

91.375*** (df = 1; 30)

69.211*** (df = 2; 29)

44.566*** (df = 3; 28)

Note:

*p<0.1; **p<0.05;** p<0.01

correlation matrix with `stargazer()` function

```r
library(stargazer, quietly = TRUE)
#change type according output : latex, html
correlation.matrix <- cor(attitude[,c("rating","complaints","privileges")])
stargazer(correlation.matrix, title="Correlation Matrix", type = 'html')
```

Correlation Matrix

rating

complaints

privileges

rating

1

0.825

0.426

complaints

0.825

1

0.558

privileges

0.426

0.558

1

Insert an equation

$$Y = \beta_0 + \beta_1 x$$

Insert images

Here is an image inserted

r logo

Figure 1:

Insert an Animated GIF and video (only works in html formats)

```
#![sunstar](sunstar/sunstar.gif)
```

Insert text with some footnotes

Here is footnote reference [1] and another [2]

Here is an inline footnote [3]

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[1] Here is a footnote.

[2] Here's one with multiple blocks.

[3] Inline notes are easier to write, since you don´t have to pick an identifier and move down to type the note.