Sample homework

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This is a sample of how I would like the homework to look when turned in. This is a sample of how I would like the homework to look when turned in. *It will look a bit better imo, because you will knit to pdf rather than html as shown here.*

Homework 1

Your Name

Date

Problem 1

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.

You can embed an R code chunk like this, note that `kable` makes REALLY nice tables with ZERO effort as seen in Table 1. Don't just print output to consol, use kable!! In my opinion, including code to create tables in-line is a detraction, this is simple to show you how easy it is to do it. Code that is relevant to the problem should be included, code that is for display or as a summary, should be omitted in-line and it is up to you on if it should be included in an Appendix.

```
#####
#####
##### Problem 1: Data summary #####
##### output using kable
#####
#####
knitr::kable(summary(cars), caption = "Quick summary of car data.")
```

Table 1: Quick summary of car data.

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

Likewise, `stargazer` simplifies making tables of linear model output. See Table 2 below. See how simple?? Note that you don't need to set the type AND it will look better when knit to pdf.

```
#####
#####
##### Problem 1: Quick lm #####
##### output using Stargazer
#####
#####
fit <- lm(dist ~ speed, data = cars)
stargazer(fit,header = F,type = "html")
```

Dependent variable:

dist

speed

3.932***

(0.416)

Constant

-17.579**

(6.758)

Observations

50

R2

0.651

Adjusted R2

0.644

Residual Std. Error

15.380 (df = 48)

F Statistic

89.567*** (df = 1; 48)

Note:

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

Problem 2

You can also embed plots and have Rmarkdown figure out the figure number automatically. Make sure and name the code chuck and then reference the figure using \@ref(fig:Problem2a). See Figure @ref(fig:Problem2a) for example (note, this shows up correctly when knit to pdf):

```
#####
#####
##### Problem 2: plot #####
##### making a pie chart
#####
#####
par(mar = c(0, 1, 0, 1))
pie(
  c(280, 60, 20),
```

```
  c('Sky', 'Sunny side of pyramid', 'Shady side of pyramid'),
  col = c('#0292D8', '#F7EA39', '#C4B632'),
  init.angle = -50, border = NA
)
```
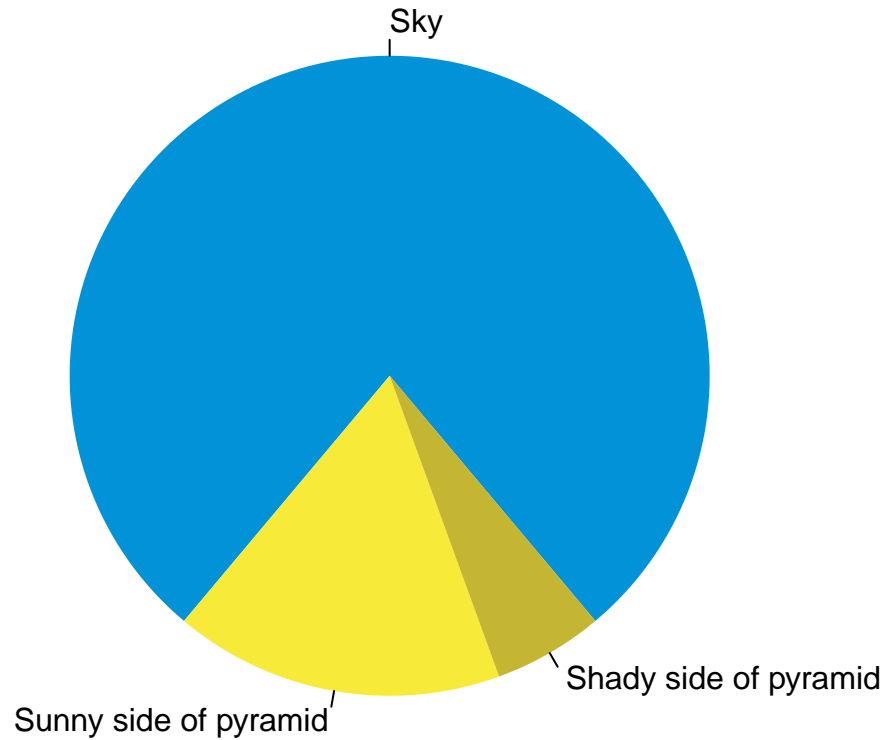

Figure 1: A fancy pie chart.

Appendix 1: R code

If you name the code chucks, it is easy to include code not really important to the main text but necessary as an Appendix. For instance:

```
#####
#####
##### Project setup #####
#####
#####
#####
knitr::opts_chunk$set(collapse = TRUE)
library(stargazer)
#####
#####
#####
#####
##### Problem 1: Data summary #####
##### output using kable
#####
```

```r
#####
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#####
#####
##### Problem 1: Quick lm #####
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)
```