Homework06.rmd

Peyton Hall

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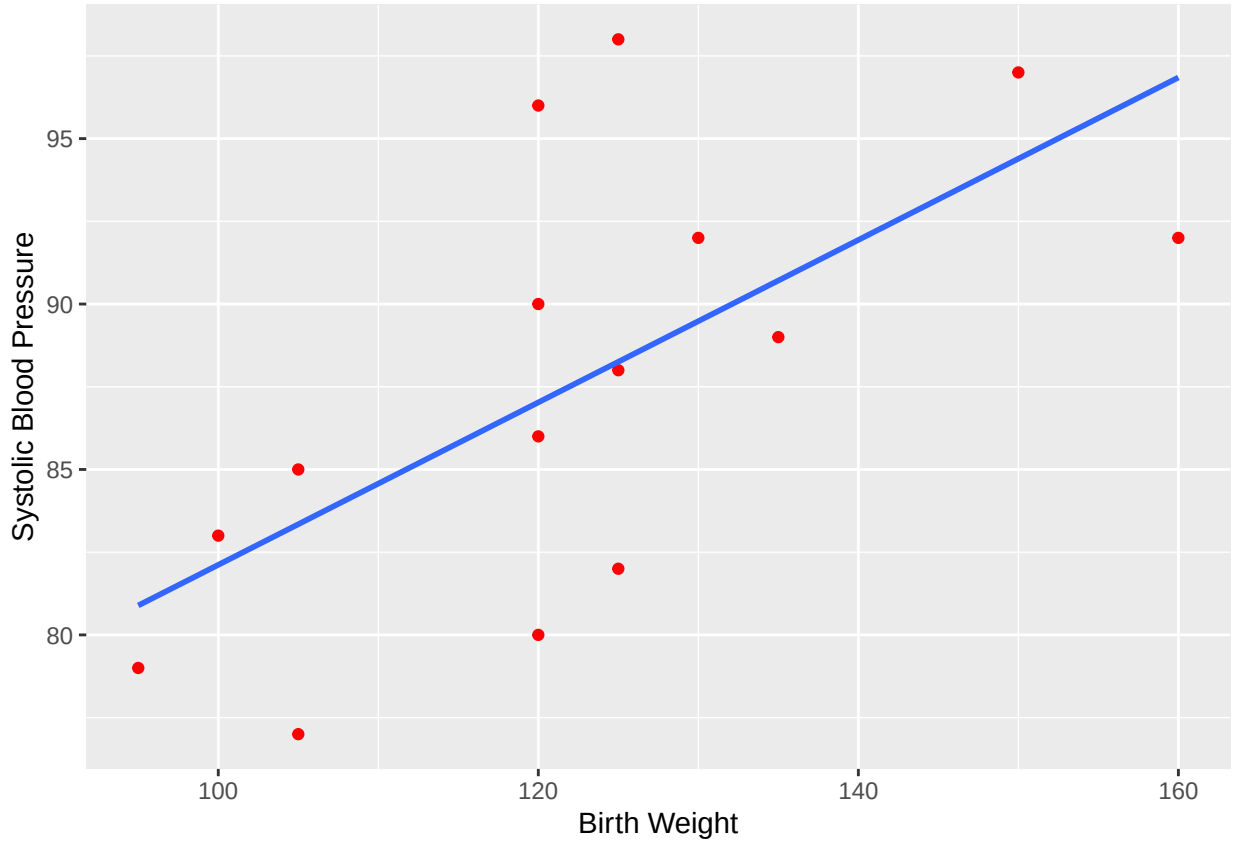
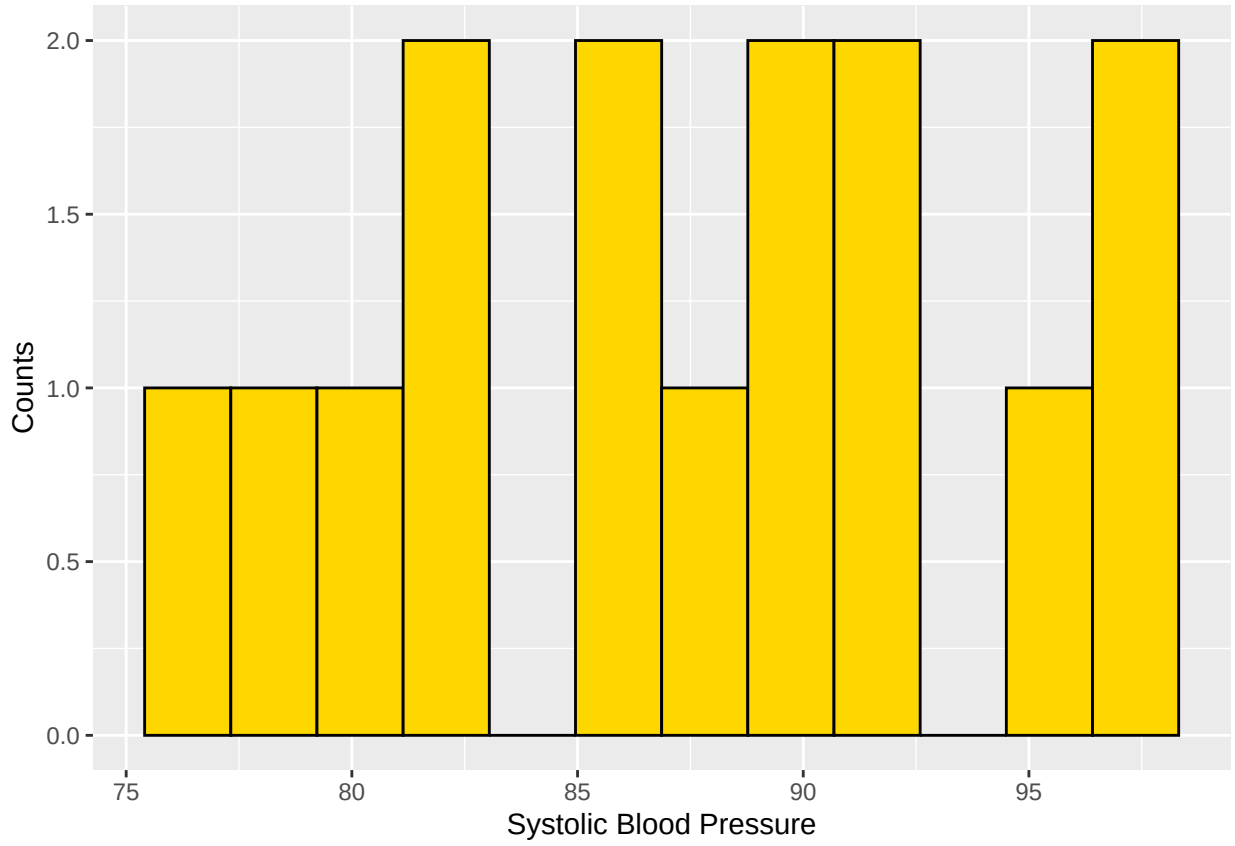
```
library(readxl)
# hover over xlsx file + option + command + c  + command + v
birthweight <- read_excel("/Users/peytonhall/Desktop/Data211/Week 6/birthweight.xlsx")
#View(birthweight)

library(ggplot2)

# Create the plot
ggplot(birthweight, aes(x = Birthweight, y = SBP)) +
  geom_point(color = "red") +  # Make the points red
  labs(x = "Birth Weight", y = "Systolic Blood Pressure")  +
  geom_smooth(method = "lm", se = FALSE)  # Add a regression line
```

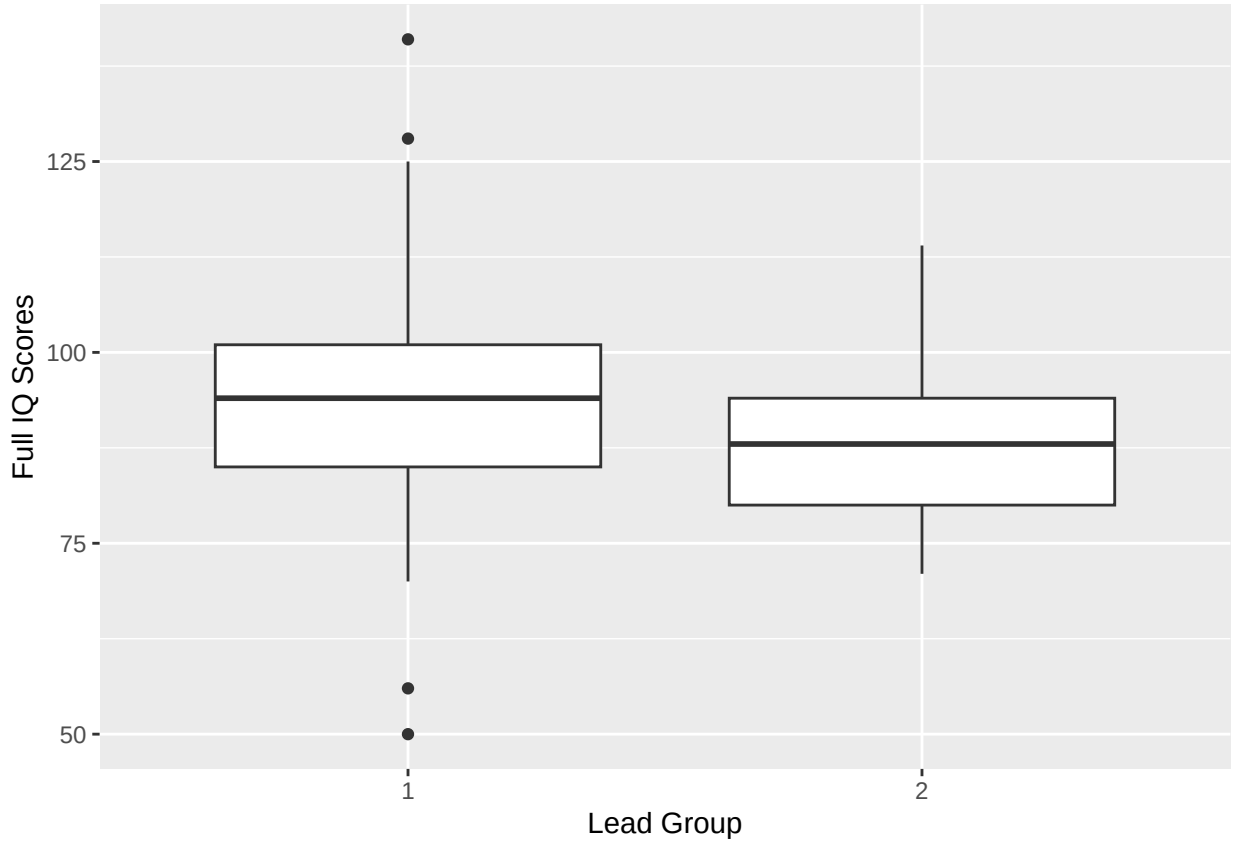
```
## `geom_smooth()` using formula = 'y ~ x'
```



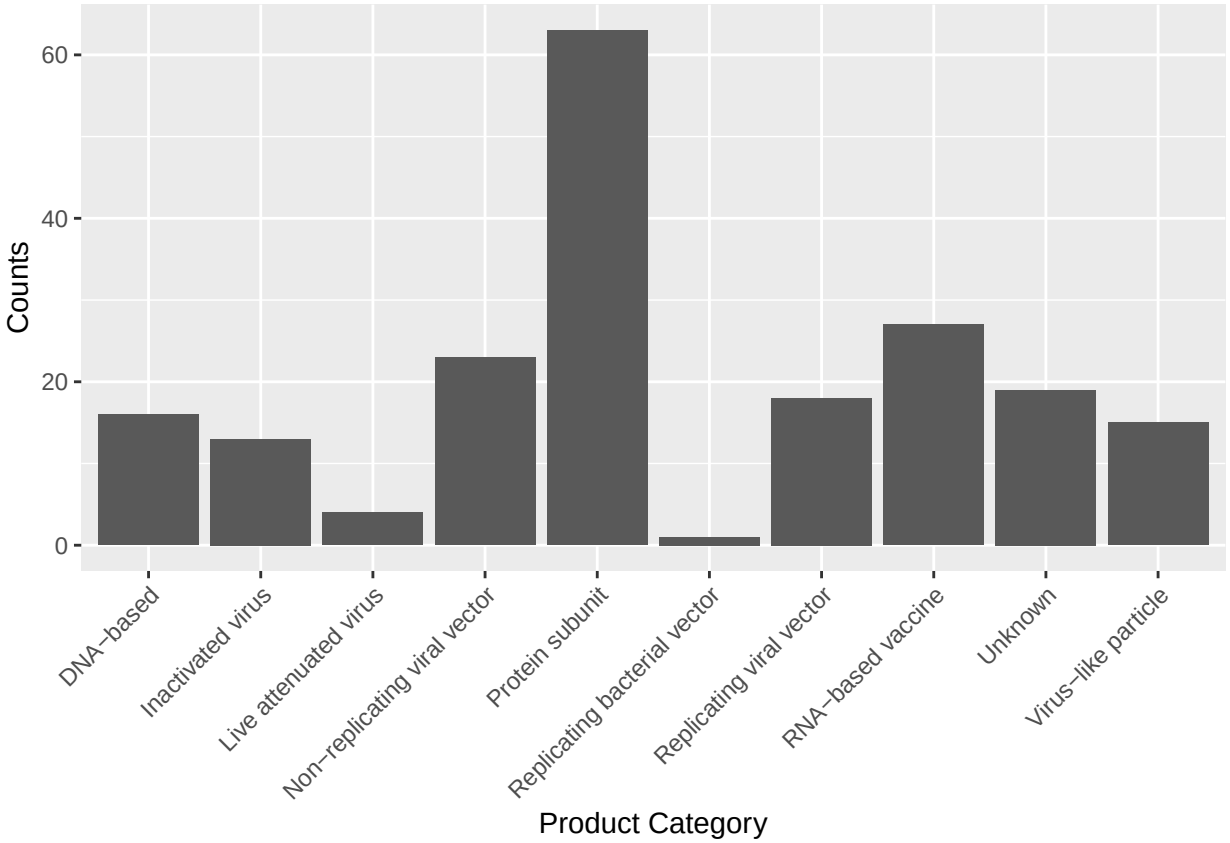
```r
library(ggplot2)

# Create the histogram
ggplot(birthweight, aes(x = SBP)) +
  geom_histogram(bins = 12, fill = "gold", color = "black") +
  labs(x = "Systolic Blood Pressure", y = "Counts")
```




```r
library(readxl)
LEAD <- read_excel("/Users/peytonhall/Desktop/Data211/Week 6/LEAD.xlsx")
#View(LEAD)

library(ggplot2)

# Create a boxplot
ggplot(LEAD, aes(x = as.factor(Group), y = iqf)) +
  geom_boxplot() +
  labs(x = "Lead Group", y = "Full IQ Scores")
```




```
library(readxl)
COVIDVaccine <- read_excel("/Users/peytonhall/Desktop/Data211/Week 6/COVIDVaccine.xlsx")
#View(COVIDVaccine)

# Create the bar graph
ggplot(COVIDVaccine, aes(x = ProductCategory)) +
  geom_bar() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1)) +
  labs(x = "Product Category", y = "Counts")
```

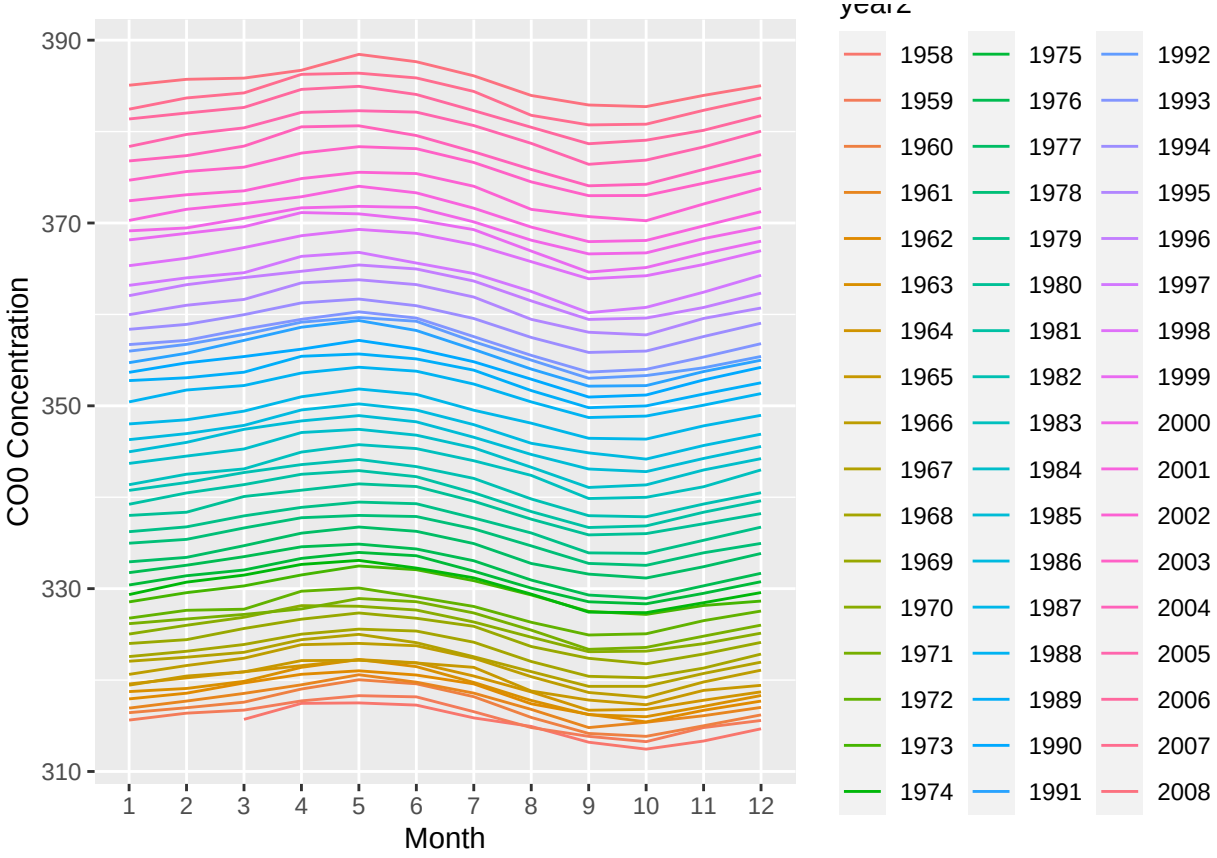


Note: Question 5 is the only question I initially could not come up with a solution for. However, I was able to find one and understand the code, after class, as another student was working on it.

```
library(readxl)
co2_loa <- read_excel("/Users/peytonhall/Desktop/Data211/Week 6/co2_loa.xlsx")
#View(co2_loa)

library(ggplot2)

str(co2_loa)
```

```
## tibble [607 x 4] (S3: tbl_df/tbl/data.frame)
##  $ DateRecord: chr [1:607] "1958-03" "1958-04" "1958-05" "1958-06" ...
##  $ co2_conc  : num [1:607] 316 317 318 317 316 ...
##  $ year      : num [1:607] 1958 1958 1958 1958 1958 ...
##  $ month     : num [1:607] 3 4 5 6 7 8 9 10 11 12 ...
```

```
co2_loa$month2<-as.factor(co2_loa$month)
co2_loa$year2<-as.factor(co2_loa$year)

ggplot(data=co2_loa, aes(x=month2, y=co2_conc))+geom_line(aes(group=year2,color=year2))+labs(x="Month",y
```


CO0 Concentration
390
370
350
330
310
1
2
3
4
5
6
7
8
9
10
11
12
Month
year2
1958
1959
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