IDS 400 Assignment 1 Part 2

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Questions

1. Which day of the week has the least number of diners on average?

2. Create a bar chart (ggplot2) showing the average number of diners on each day?

3. The default bar chart displays the bars by alphabetical order (Friday, Saturday, Sun, and Thursday).Rearrange to make the bars follow the normal week day order (Thursday, Friday, Saturday, and Sunday).

4. How many female smokers are in the tips dataset who have dined on a Friday?

```
answer4 <-
  count(filter(tips_data, smoker == "Yes", sex == "F", day == "Fri"))
pander(answer4)
```

n
7

ANSWER: 7 female smokers have dined on a Friday.

5. On average, who tips more? Males or Females?

6. Create a new variable called tipRate (tip/totbill). Add this variable to your dataset. Create a boxplot for this variable.

7. Using the results from questions 4 and 5 above, can we conclude that females are more generous in tipping? Explain.

8. What is the number of females in this dataset who paid more than 15% tips?

9. Create a scatter plot with totbill on the x-axis and tip on the y-axis. The chart should show data points corresponding to female customers in a different colour from points corresponding to male customers.

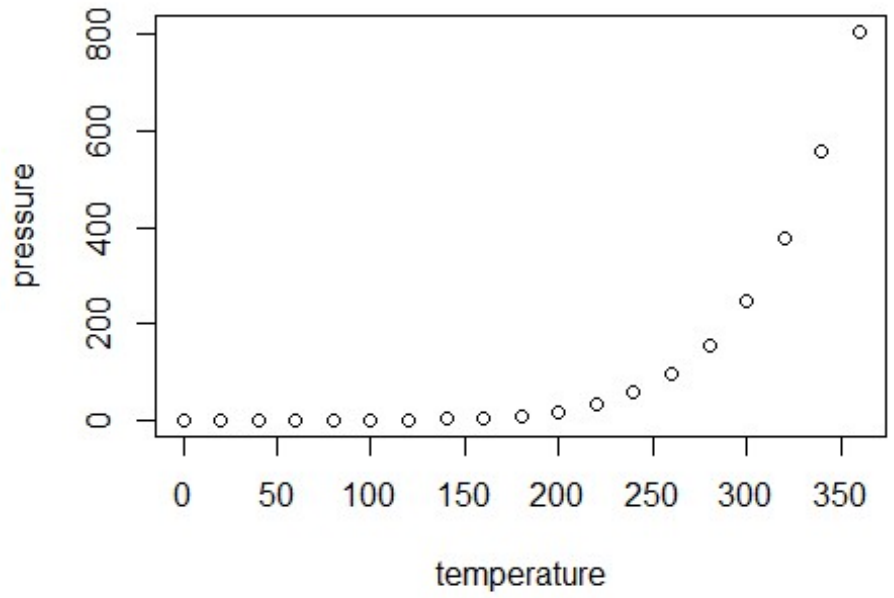
###10. How many of the parties had more than 2 people? (Hint: check for NA values and make sure they are not being counted).

```
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.