Module 12

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First markdown document and assignment for Module 12.

First a little humor:

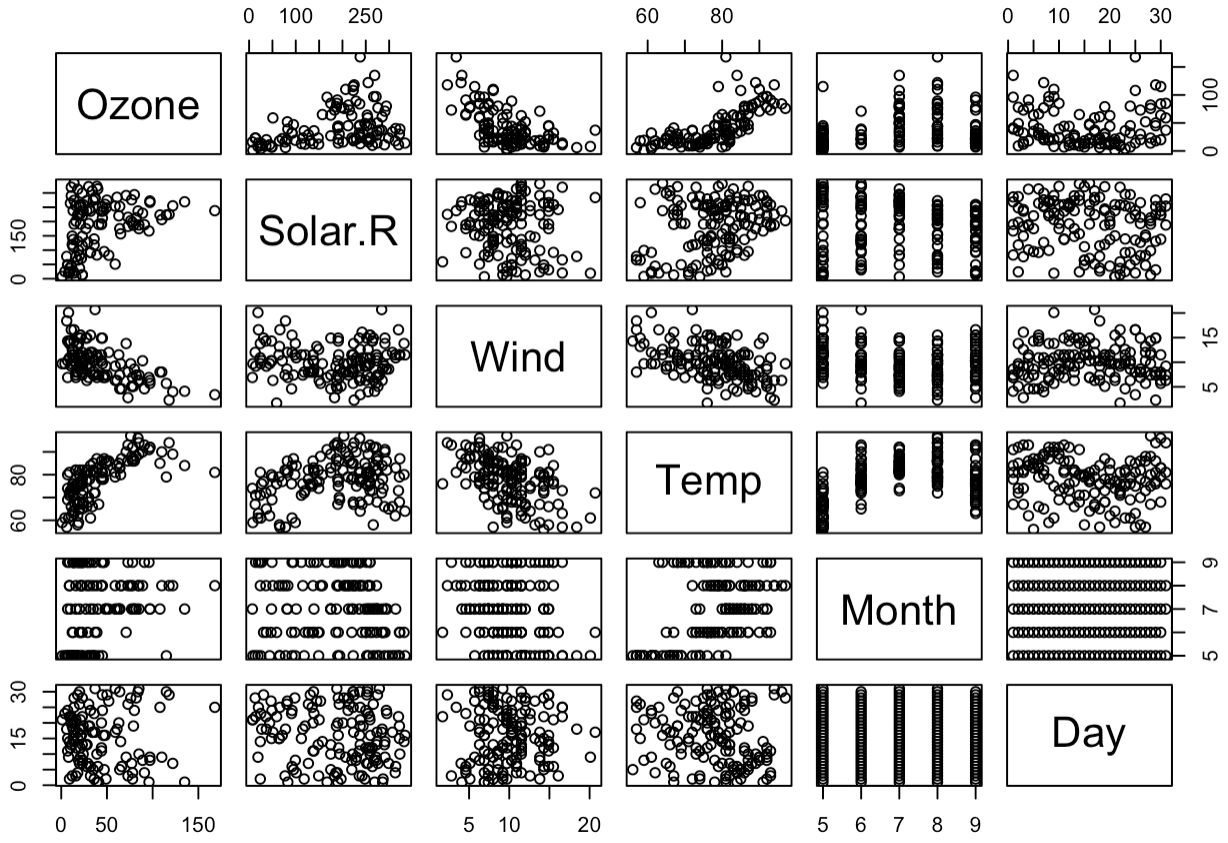
Let's load data

```
library(datasets)
data(airquality)
summary(airquality)
```

```
##      Ozone           Solar.R           Wind             Temp      
##  Min.   :  1.00   Min.   :  7.0   Min.   : 1.700   Min.   :56.00  
##  1st Qu.: 18.00   1st Qu.:115.8   1st Qu.: 7.400   1st Qu.:72.00  
##  Median : 31.50   Median :205.0   Median : 9.700   Median :79.00  
##  Mean   : 42.13   Mean   :185.9   Mean   : 9.958   Mean   :77.88  
##  3rd Qu.: 63.25   3rd Qu.:258.8   3rd Qu.:11.500   3rd Qu.:85.00  
##  Max.   :168.00   Max.   :334.0   Max.   :20.700   Max.   :97.00  
##  NA's   :37       NA's   :7                                       
##      Month            Day      
##  Min.   :5.000   Min.   : 1.0  
##  1st Qu.:6.000   1st Qu.: 8.0  
##  Median :7.000   Median :16.0  
##  Mean   :6.993   Mean   :15.8  
##  3rd Qu.:8.000   3rd Qu.:23.0  
##  Max.   :9.000   Max.   :31.0  
##
```

Here's a pairs plot of the data

```
pairs(airquality)
```



Regression model of ozone on some predictors

```
fit <- lm(Ozone~Solar.R + Wind + Temp, data = airquality)
summary(fit)
```

```
##
## Call:
## lm(formula = Ozone ~ Solar.R + Wind + Temp, data = airquality)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -40.485 -14.219  -3.551  10.097  95.619
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -64.34208   23.05472  -2.791  0.00623 **
## Solar.R       0.05982    0.02319   2.580  0.01124 *
## Wind         -3.33359    0.65441  -5.094 1.52e-06 ***
## Temp          1.65209    0.25353   6.516 2.42e-09 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 21.18 on 107 degrees of freedom
##   (42 observations deleted due to missingness)
## Multiple R-squared:  0.6059, Adjusted R-squared:  0.5948
## F-statistic: 54.83 on 3 and 107 DF,  p-value: < 2.2e-16
```

Create an unordered list

*Here's item one

*item 2

Ordered list

1. first item
2. second item

This Markdown was based off this video tutorial:

https://youtu.be/DNS7i2m4sB0 (https://youtu.be/DNS7i2m4sB0)