MMSS 311-2 HW1

Yushi Liu

```
sick <- read.csv("sick_data.csv")
sick$dummy <- ifelse(sick$result == "Positive", 0, 1)
lm <- lm(dummy~result+temp, data=sick)
summary(lm)
```

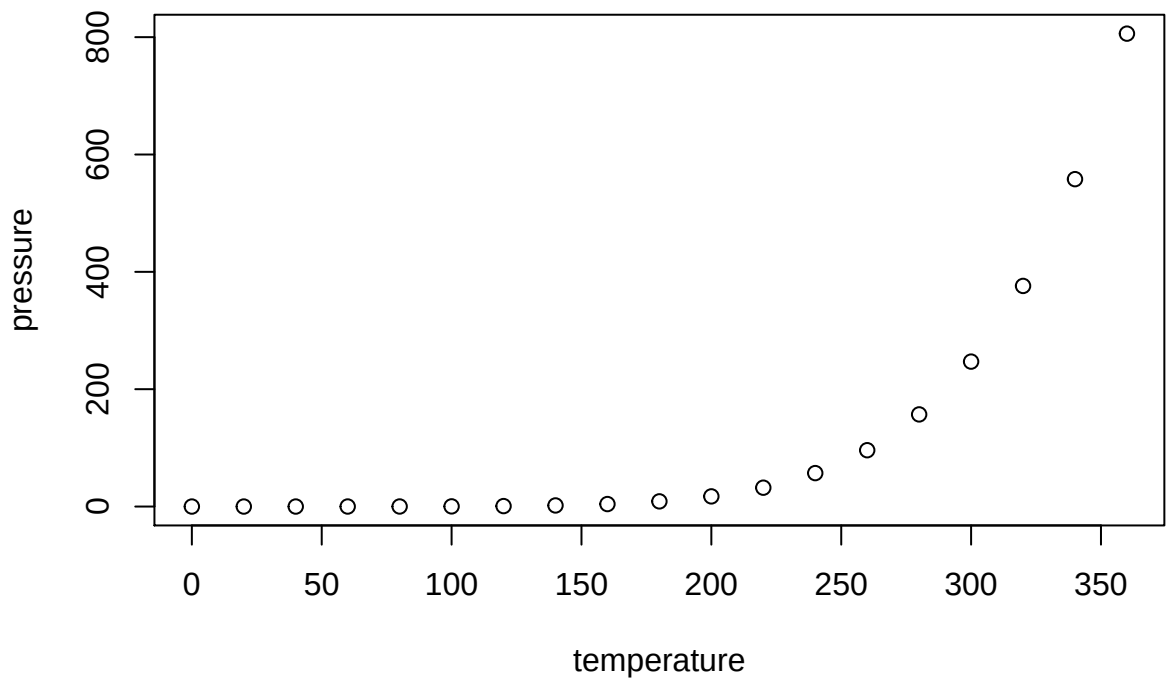
```
##
## Call:
## lm(formula = dummy ~ result + temp, data = sick)
##
## Residuals:
##        Min         1Q     Median         3Q        Max
## -5.009e-13 -1.500e-16  2.300e-16  6.800e-16  1.208e-14
##
## Coefficients:
##                  Estimate Std. Error    t value Pr(>|t|)
## (Intercept)     1.000e+00  5.333e-14  1.875e+13   <2e-16 ***
## resultPositive -1.000e+00  2.774e-15 -3.605e+14   <2e-16 ***
## temp            5.949e-16  5.440e-16  1.094e+00    0.274
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.701e-14 on 997 degrees of freedom
## Multiple R-squared:      1,  Adjusted R-squared:      1
## F-statistic: 8.212e+28 on 2 and 997 DF,  p-value: < 2.2e-16
```

Regression

```
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
```

Regularization/Selection



Classification