

Discussion - Week9

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```
library(matlib)
library(pracma)
```

```
##
## Attaching package: 'pracma'
```

```
## The following objects are masked from 'package:matlib':
##
##   angle, inv
```

```
library(readr)
```

Communities and Crime Data Set

Abstract: This dataset includes quantitative and categorical features from online reviews from 21 hotels located in Las Vegas Strip, extracted from TripAdvisor ([Web Link]).

Data Set Information: All the 504 reviews were collected between January and August of 2015.

Attribute Information: The dataset contains 504 records and 20 tuned features (as of "status = included", from Table 1 of the article mentioned below), 24 per hotel (two per each month, randomly selected), regarding the year of 2015. The CSV contains a header, with the names of the columns corresponding to the features marked as "status = included", from Table 1 of the aforementioned article.

```
destfile <- tempfile()
download.file("https://archive.ics.uci.edu/ml/machine-learning-databases/00397/LasVegasReviews.csv", destfile)
df <- read_delim(destfile, delim=';', col_names = TRUE, col_types = list('Hotel stars' = 'c', 'Score' = 'd', 'Review text' = 'c'))
```

```
## Warning: One or more parsing issues, call `problems()` on your data frame for details.
## e.g.:
##   dat <- vroom(...)
##   problems(dat)
```

```
mylm <- lm(df$Score ~ df$'Hotel stars')
summary(mylm)
```

```
##
## Call:
## lm(formula = df$Score ~ df$"Hotel stars")
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.3369 -0.3369  0.3262  0.6631  1.3262
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    2.67908    0.26070   10.277 < 2e-16 ***
## df$"Hotel stars"  0.33156    0.06047    5.483 7.35e-08 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9851 on 406 degrees of freedom
## (96 observations deleted due to missingness)
## Multiple R-squared:  0.06895,    Adjusted R-squared:  0.06666
## F-statistic: 30.07 on 1 and 406 DF,  p-value: 7.351e-08
```

```
plot(mylm)
```

