STA305 tech report

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### Importing the data

This is the data we will use, it contains all the stores with blocking as well as the nutritional information and its price.

data <- readxl::read\_excel("Data.xlsx", sheet = "All Stores with Stores Block")  
  
colnames(data) <- gsub( " ", "\_", colnames(data))

### Background

With the information presented below, we will check whether the data satisfies the assumptions of Guass-markov assumptions as well as the assumptions of linear regression.

## Walmart

# Price vs Calories

model <- lm(Price ~ NV\_Calories, data=subset(data, Store == 'Walmart'))  
  
plot(Price ~ NV\_Calories, main="Price vs Calories for Walmart", data=subset(data, Store == 'Walmart'))  
  
abline(a = model$coefficients[1], b = model$coefficients[2], col="blue")

