Week 8 Class

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First let's load in the Starbucks data.

For all Pastries

Now, let's look at the mean, standard deviation and sample size of the calorie variable.

```
starbucks %>%
  summarise(
  mean_cal = mean(calories),
  sd_cal = sd(calories),
  n_cal = n())
```

```
## # A tibble: 1 x 3
##   mean_cal sd_cal n_cal
##      <dbl>  <dbl> <int>
## 1     339.   105.    77
```

Or in base R:

```
xbar_cal <- mean(starbucks$calories)
s_cal <- sd(starbucks$calories)
n_cal <- length(starbucks$calories)
```

The 95% CI for mean calories is 336.1491057 to 341.5132319. Here we are assuming that $n = 77$ is relatively large.

For Petite Pastries only

```
starbucks_petite <- starbucks %>% filter(type == "petite")
```

```
xbar_cal_p <- mean(starbucks_petite$calories)
s_cal_p <- sd(starbucks_petite$calories)
n_cal_p <- length(starbucks_petite$calories)
```

The 95% CI for mean calories in petite pastries is 174.9775036 to 180.5780519. Here we are assuming that $n = 8$ is relatively small.