

## Hypothesis Testing- Fantaloons

```
> df_tab2 = table(df_falt);df_tab2
```

```
      Day  
Gender Weekdays weekend  
    1      287     233  
    2      113     167
```

```
> chisq.test(df_tab2)
```

Pearson's Chi-squared test with Yates' continuity correction

data: df\_tab2

X-squared = 15.434, df = 1, **p-value = 8.543e-05**

**P value 8.543e-05 < 0.05, so rejecting null hypothesis and accepting Ha.**

**Males and females walking into store in weekdays and weekend are differ.**

### **##### Two Proportional T Test #####**

2-sample test for equality of proportions without continuity correction

data: c(66, 120) out of c(280, 340)

X-squared = 10.048, df = 1, **p-value = 0.001525**

alternative hypothesis: **two.sided**

95 percent confidence interval:

-0.18830339 -0.04615039

sample estimates:

prop 1 prop 2  
0.2357143 0.3529412

```
> prop.test(x=c(167,47),n=c(280,340),conf.level = 0.95,  
+          correct = FALSE,alternative = "two.sided")
```

2-sample test for equality of proportions without continuity correction

data: c(167, 47) out of c(280, 340)

X-squared = 142.62, df = 1, **p-value < 2.2e-16**

alternative hypothesis: **two.sided**

95 percent confidence interval:

0.3900153 0.5263713

sample estimates:

prop 1 prop 2  
0.5964286 0.1382353

**P values are less than 0.05, so rejecting Ho and accepting Ha.**