

Exercise 1

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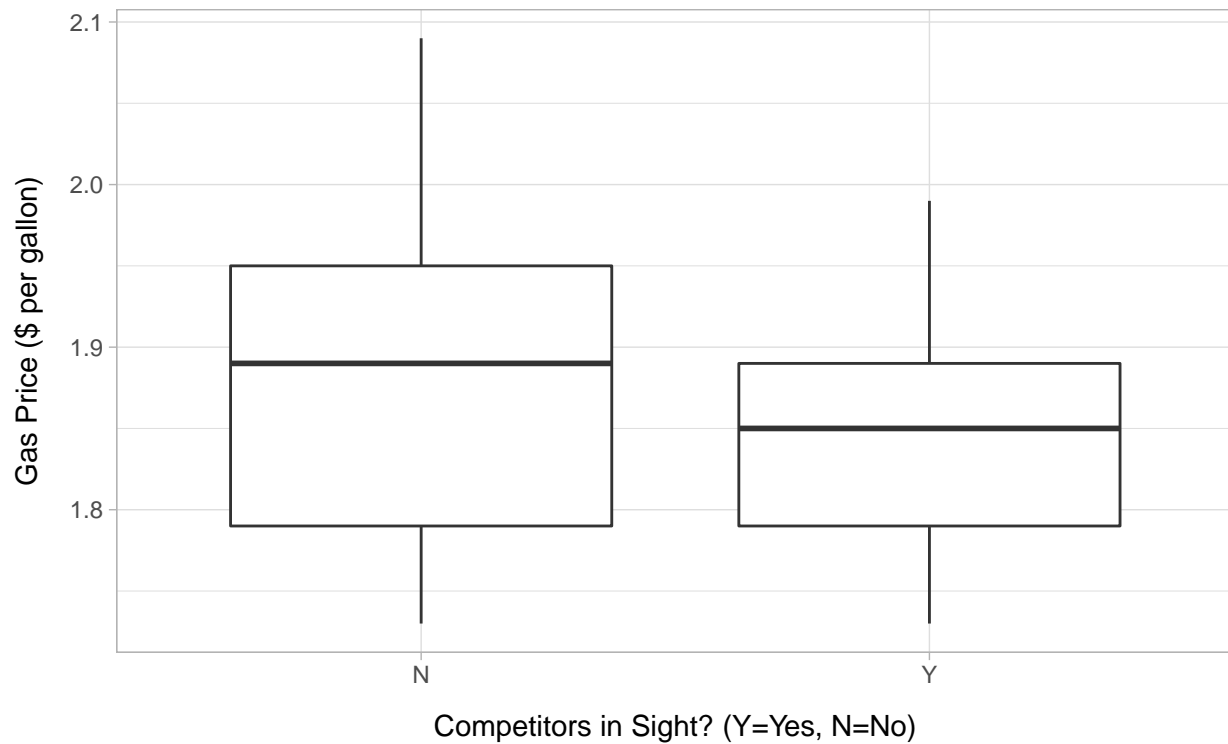
1) Gas Prices

In this problem, we assess five possible theories about consumer gas prices in Austin, Texas using 2016 price data from 101 gas stations in the city.

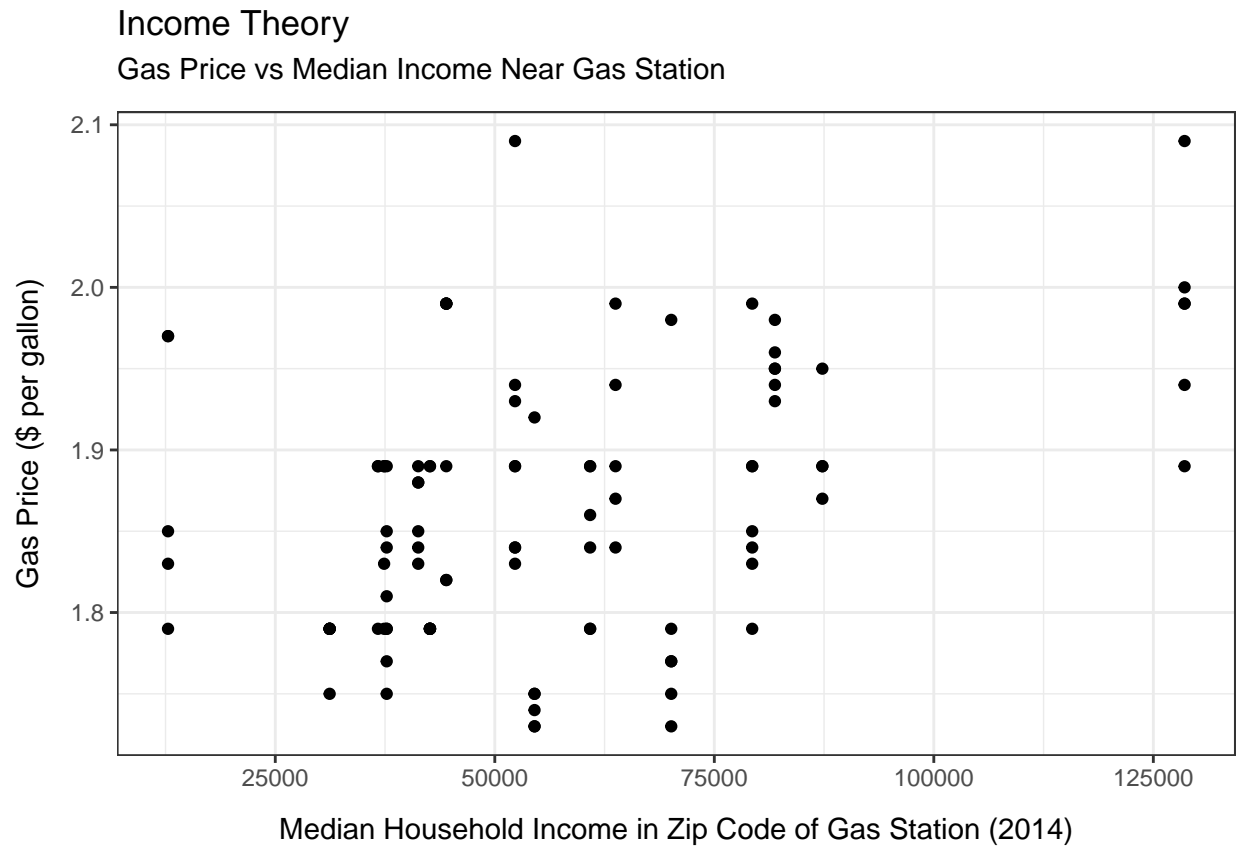
A) Competitor Theory: Gas stations charge more if they lack direct competition in sight

Competitor Theory

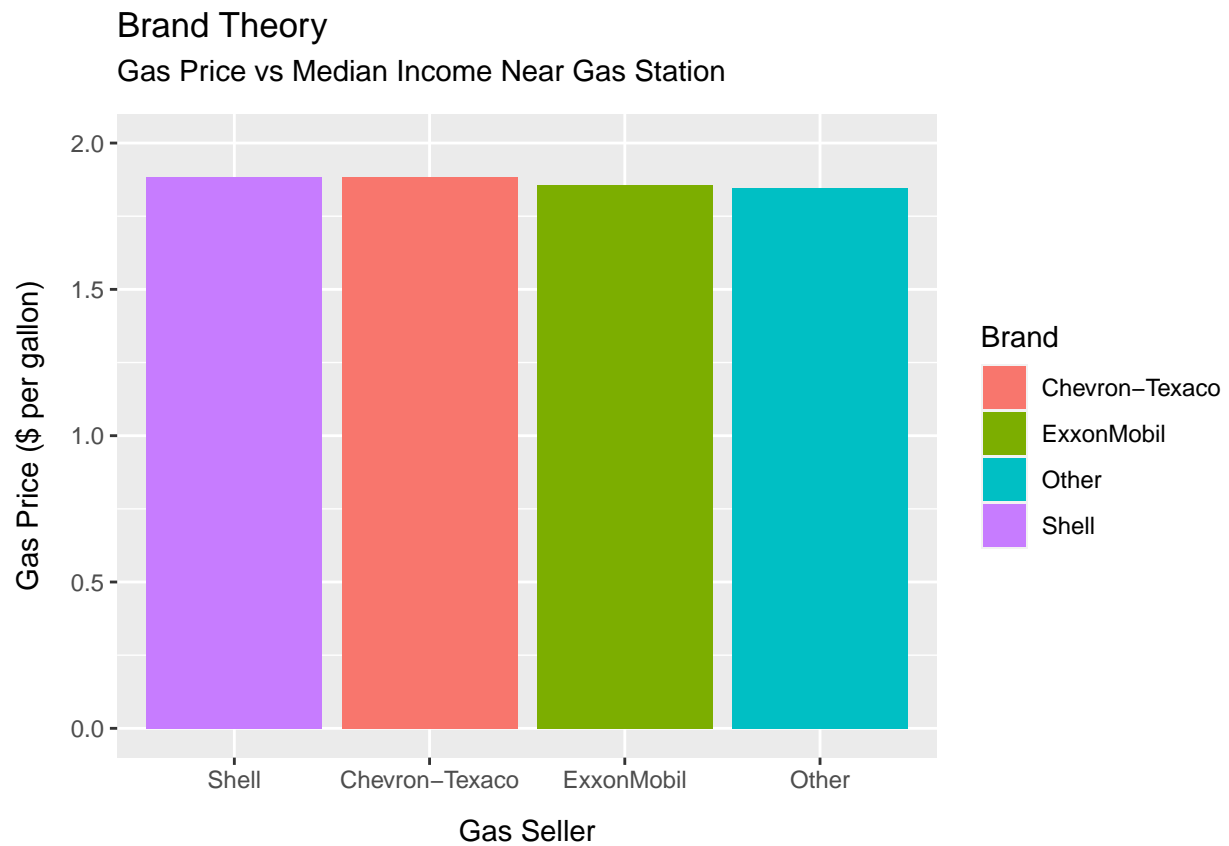
Gas Price by Whether Competitors Are in Sight of Station



B) Income Theory: The richer the area, the higher the gas price



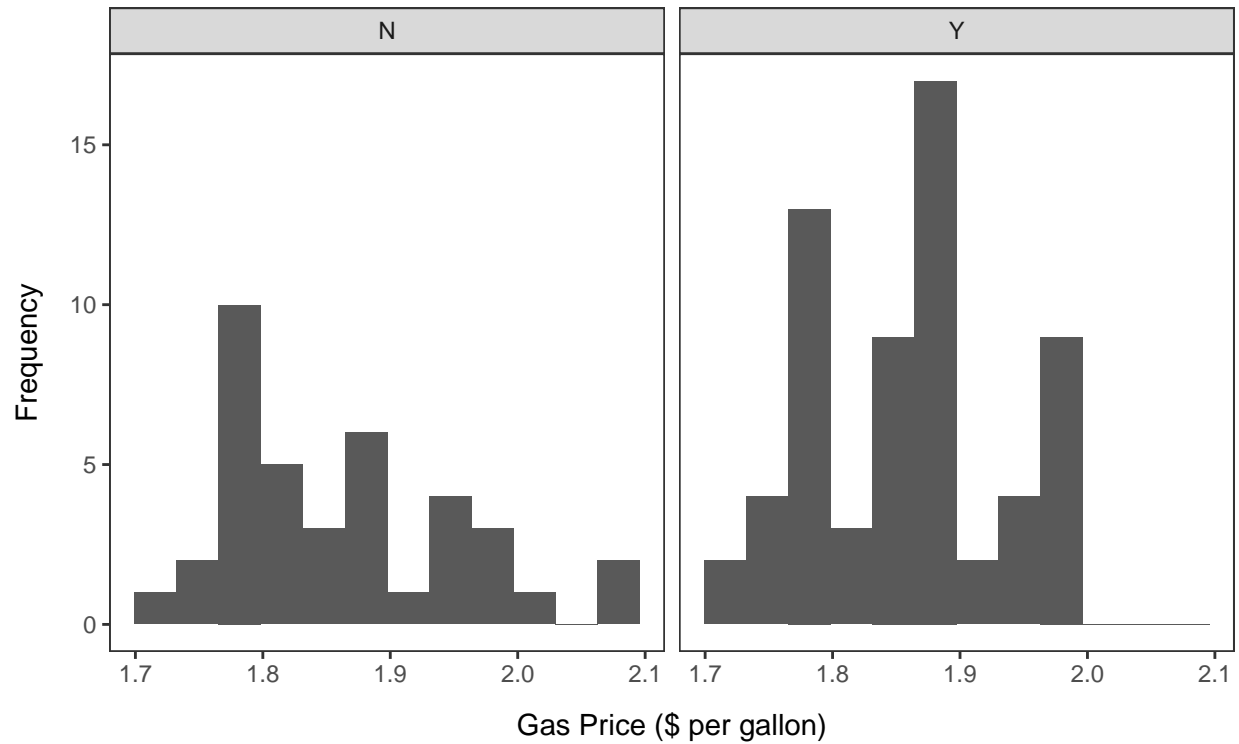
C) Brand Theory: Shell charges more than other brands



D) Stoplight Theory: Gas stations at stoplights charge more

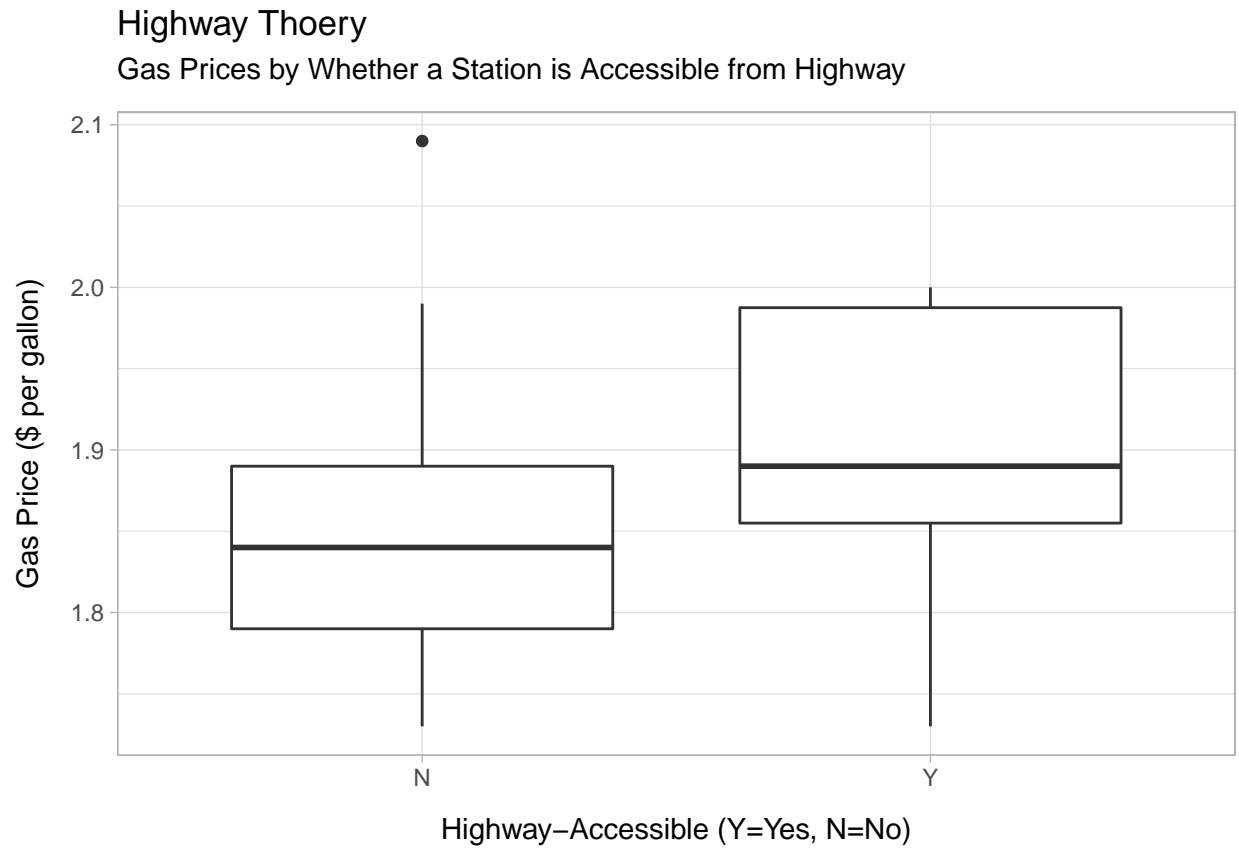
Stoplight Theory

Gas Prices by Whether a Stoplight Is in Front of Station



```
## # A tibble: 2 x 2
##   Stoplight mean_price2
## * <chr>          <dbl>
## 1 N              1.87
## 2 Y              1.86
```

E) Highway Theory: Gas stations with direct highway access charge more



2) Bike Share Network

Text...

3) Flights at ABIA

Text...

4) K-Nearest Neighbors

Text...