

SDS 315 Homework 2

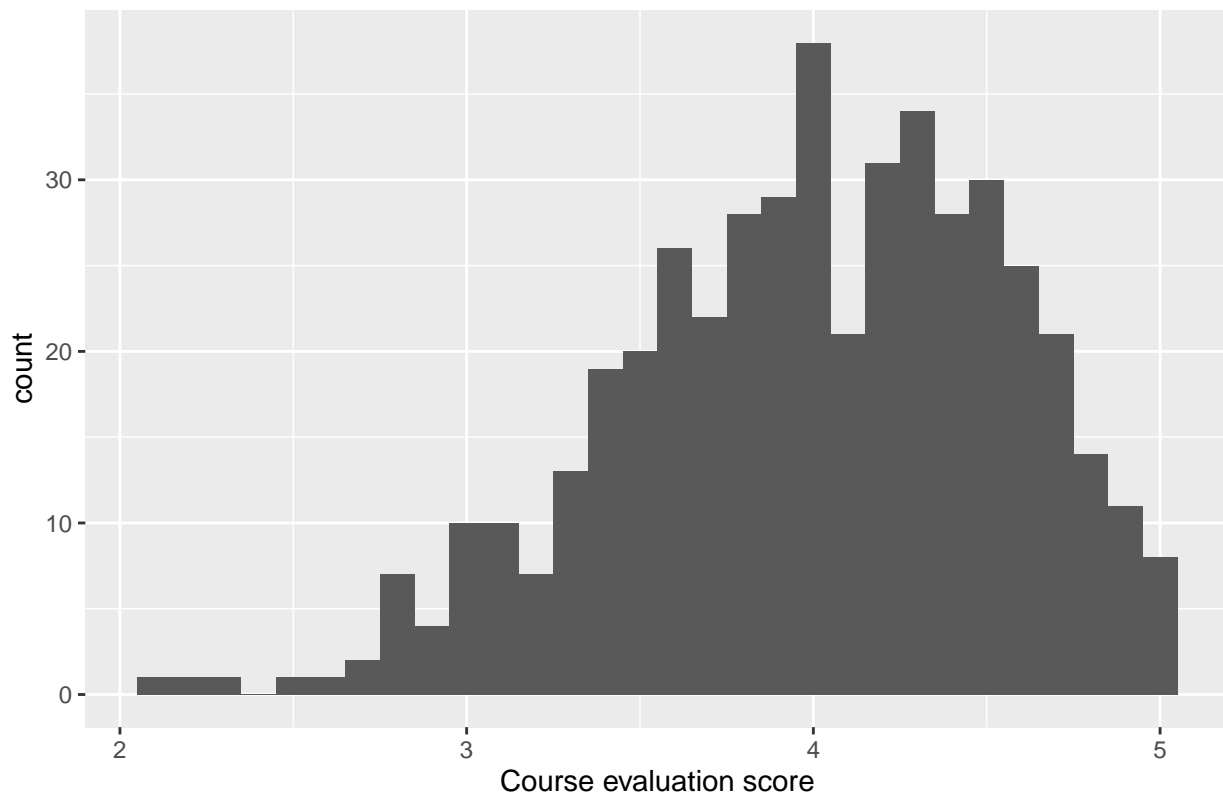
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Click [here](#) for link to GitHub repository

January 28, 2025

Problem 1: Beauty, or not, in the classroom

Part A

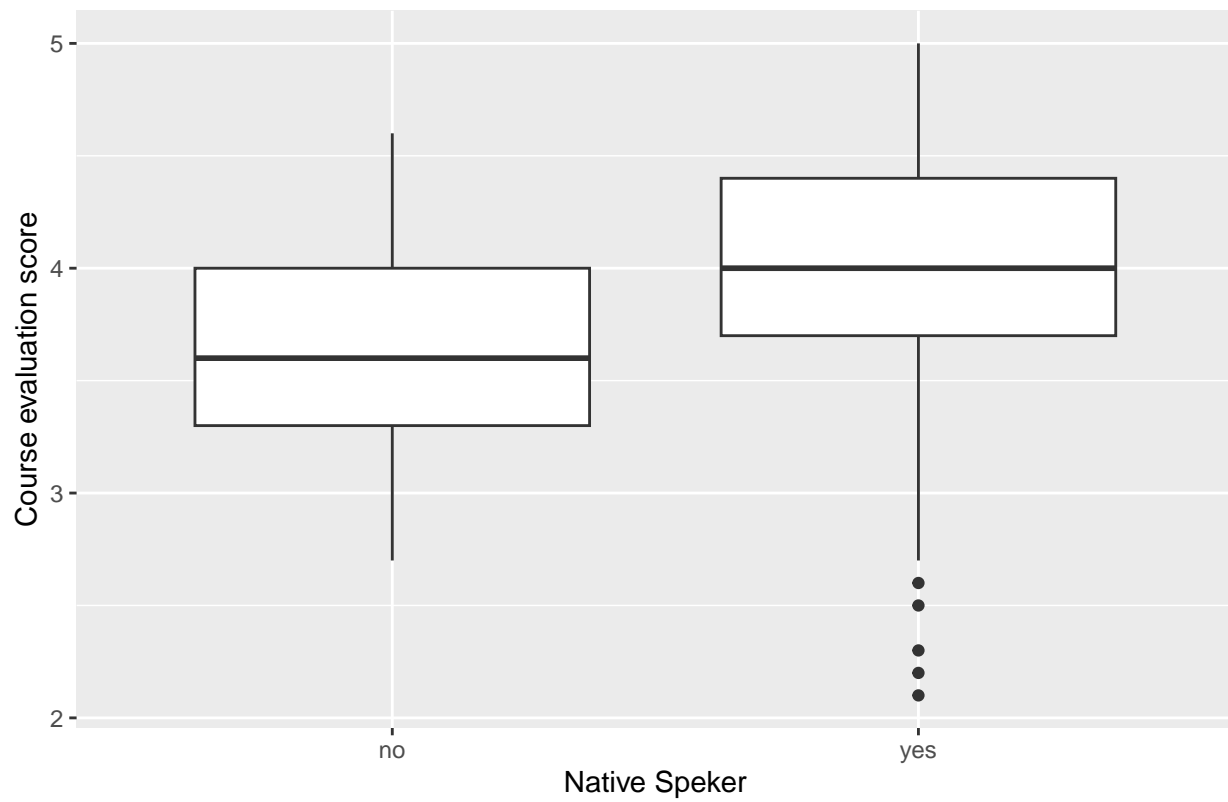
Distribution of course evaluation scores



The above histogram shows the distribution of course evaluation scores for a sample of 463 UT Austin courses. The distribution reveals that even though students had an option to rank courses on a scale from 1 to 5, the lowest evaluation score given was 2.1 and the highest was 5. The histogram is skewed towards the left slightly meaning the median, 4 and IQR, 0.8 are used to summarize the data.

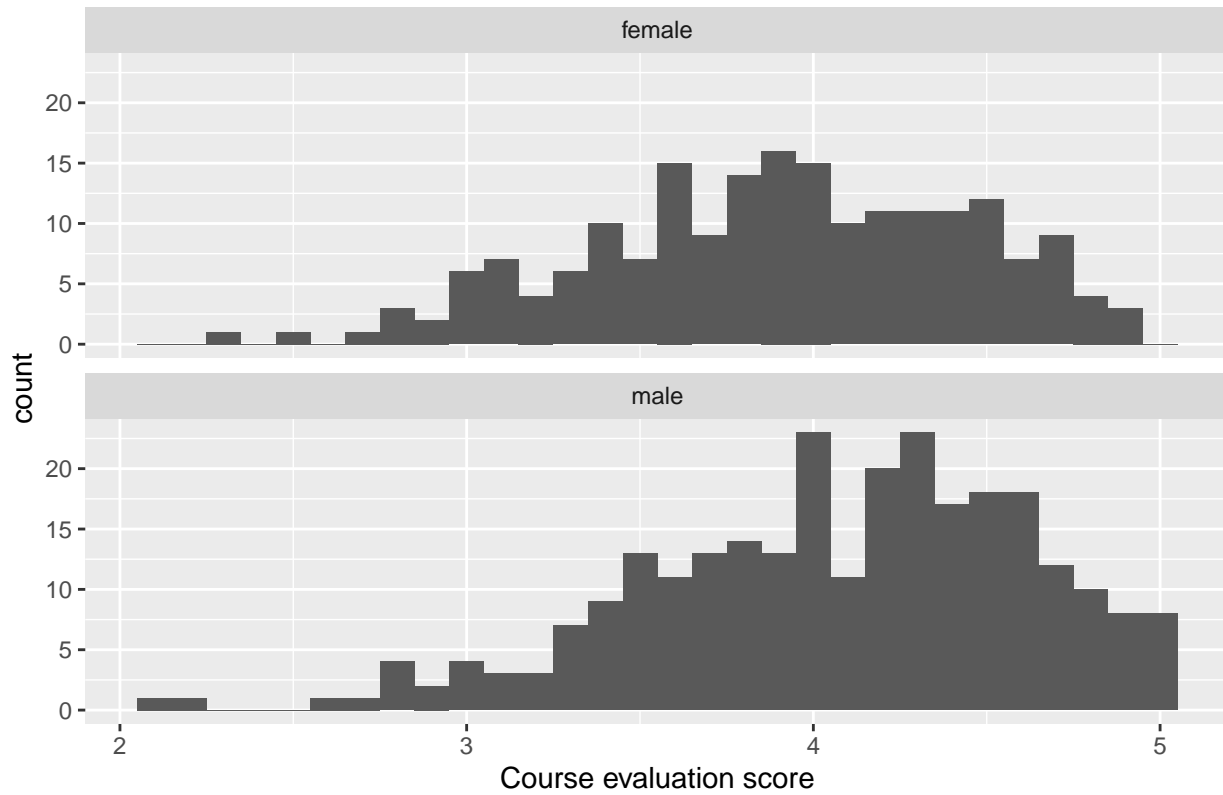
Part B

Course evaluation scores for native and non-native english speakers



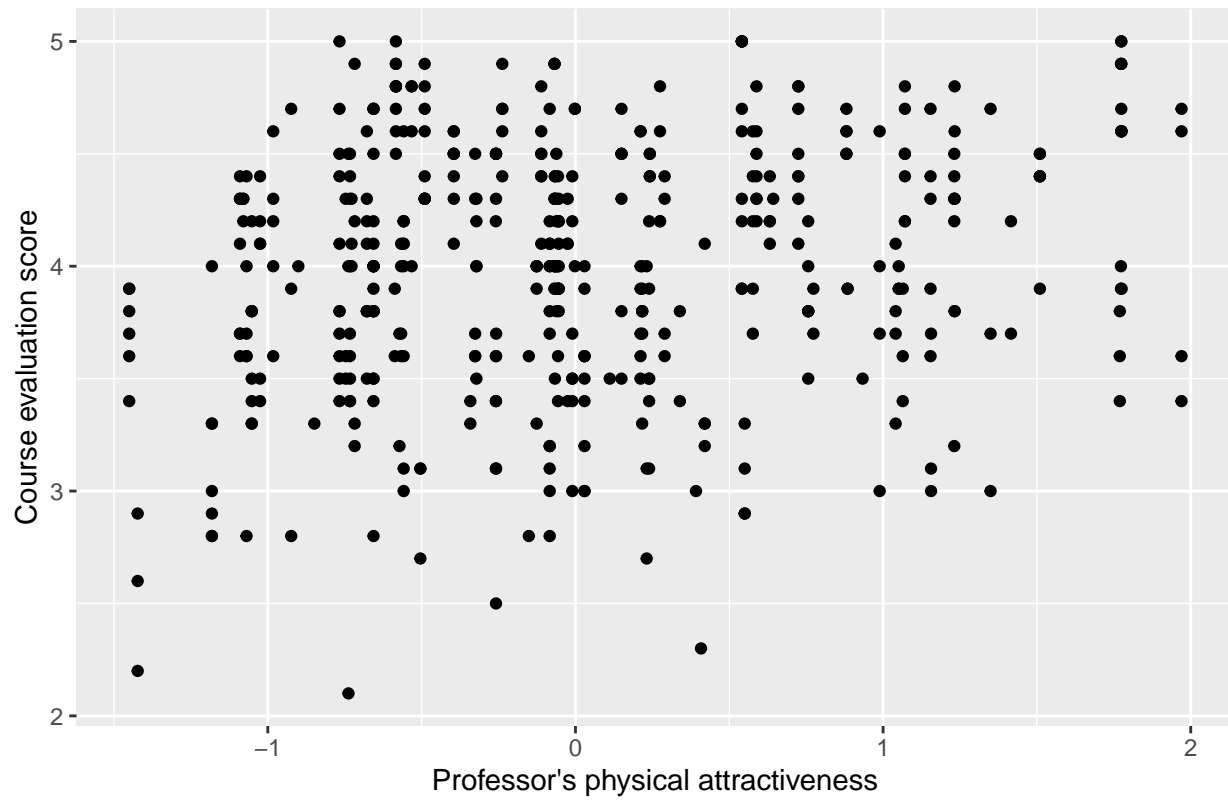
Part C

Distribution of evaluation scores by gender



Part D

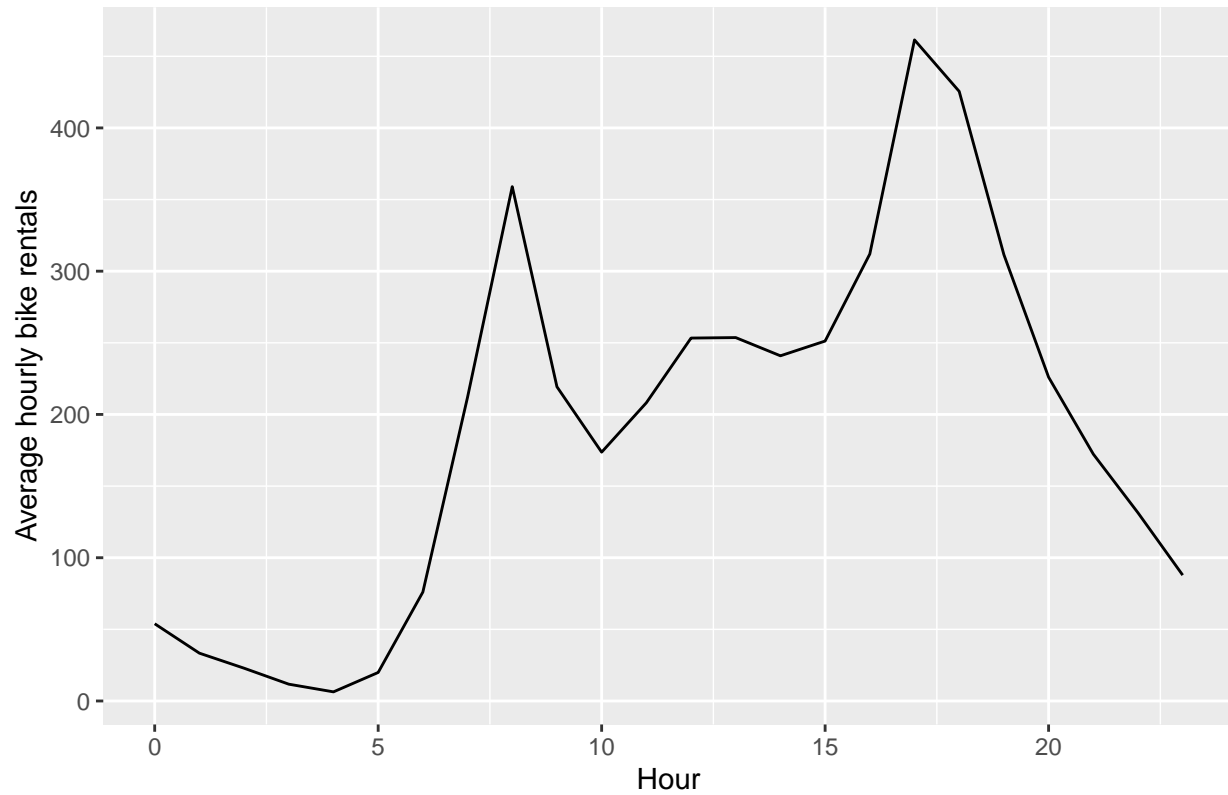
Correlation professor's physical attractiveness and course evaluation score



Problem 2: bike sharing

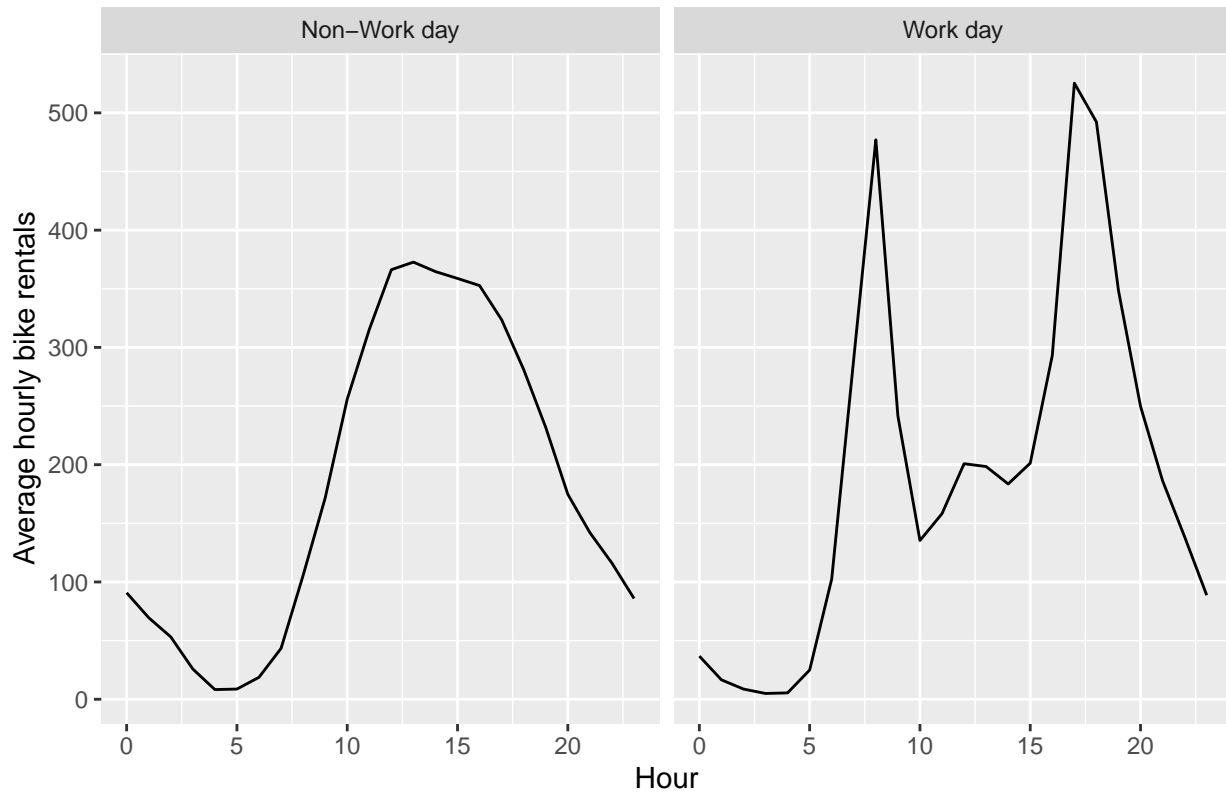
Part A

Average hourly bike rentals across hours of the day



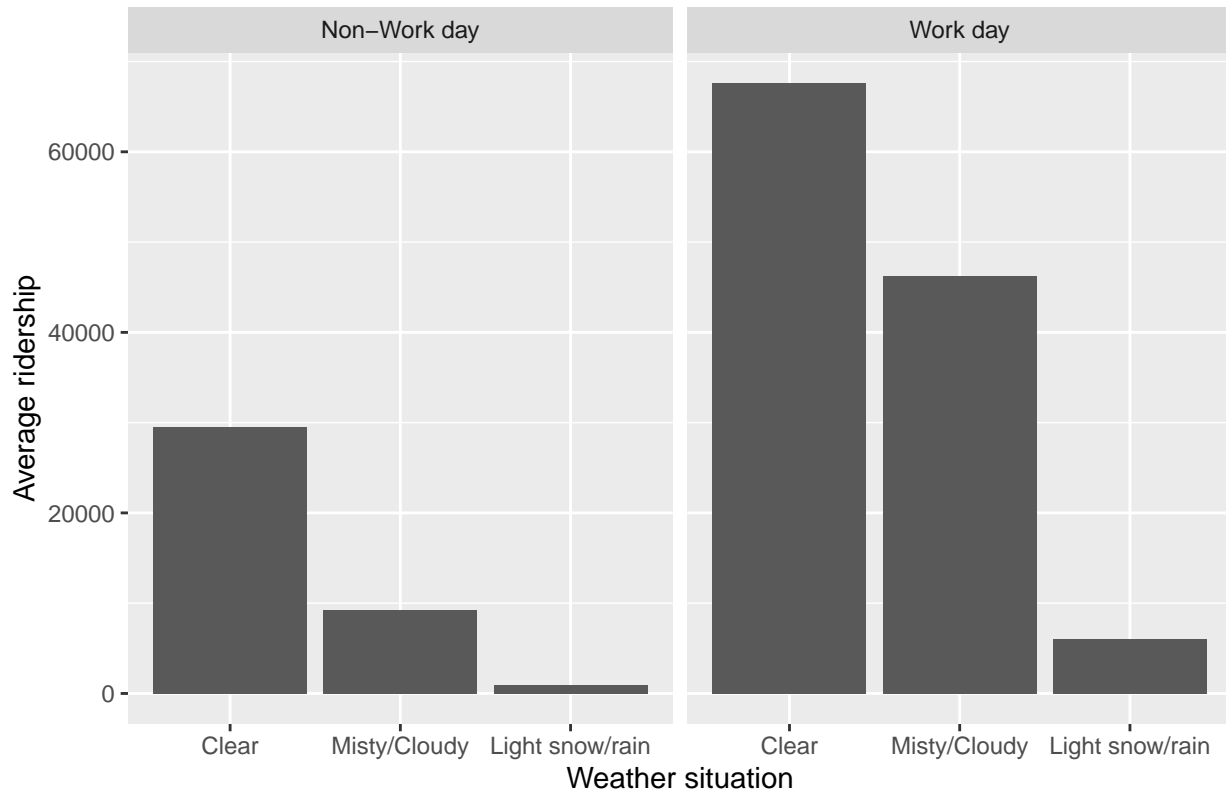
Part B

Average hourly bike rentals across hours of the day



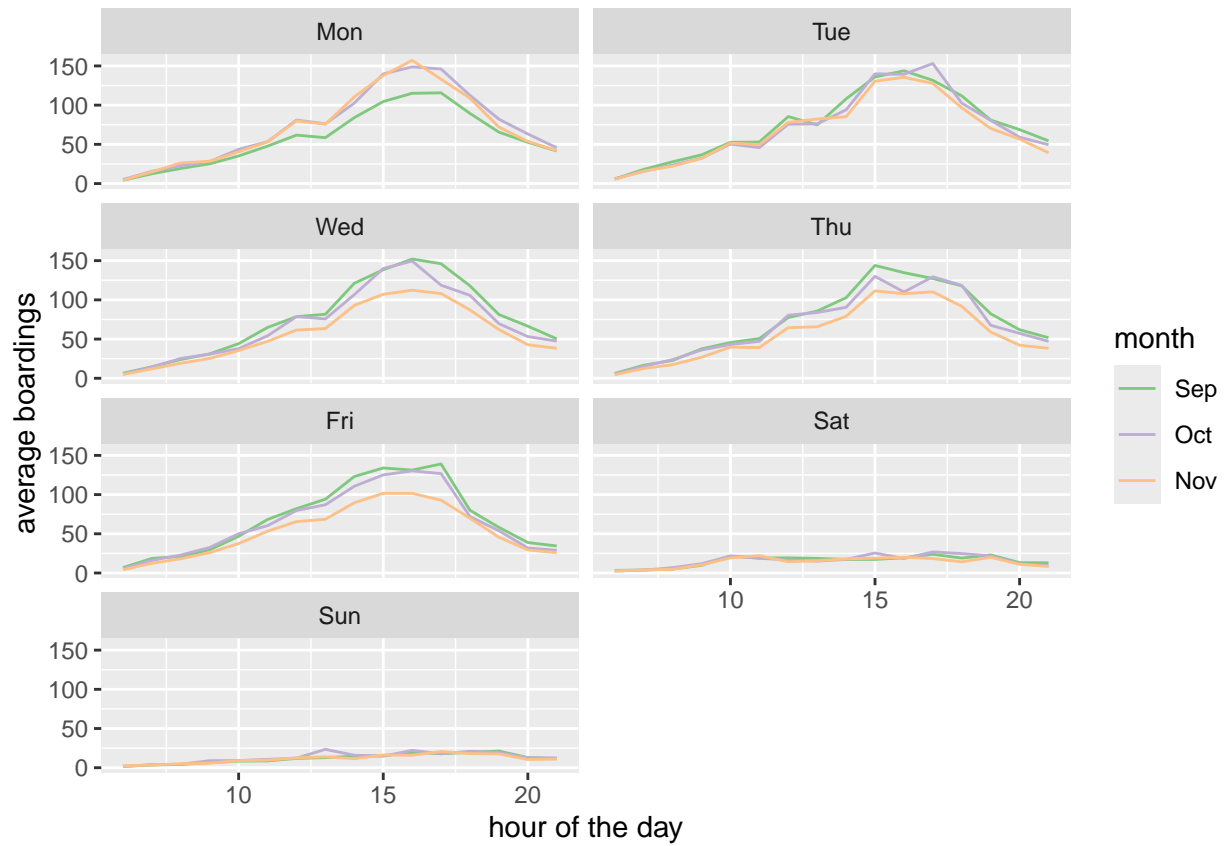
Part C

Average ridership during the 9 AM hour based on weather situation

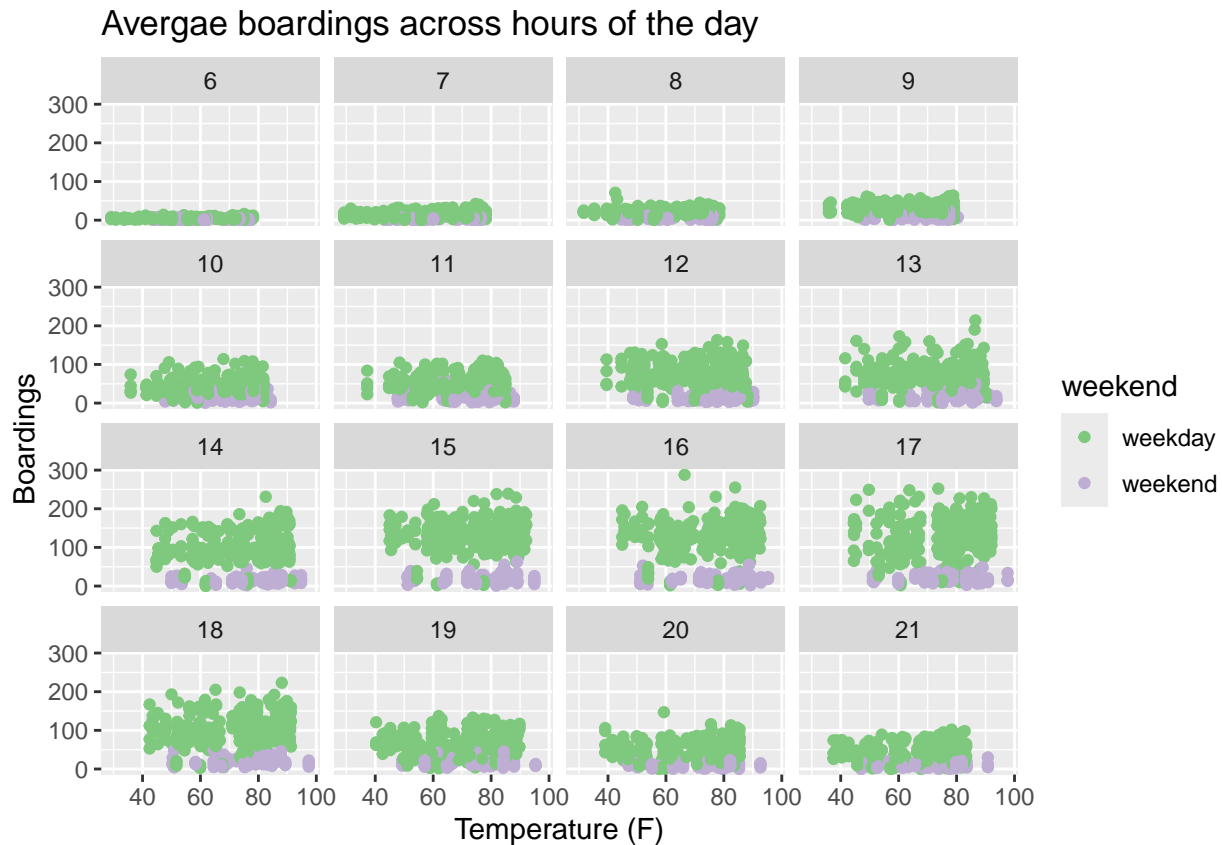


Problem 3: Capital Metro UT Ridership

Question 1



Question 2



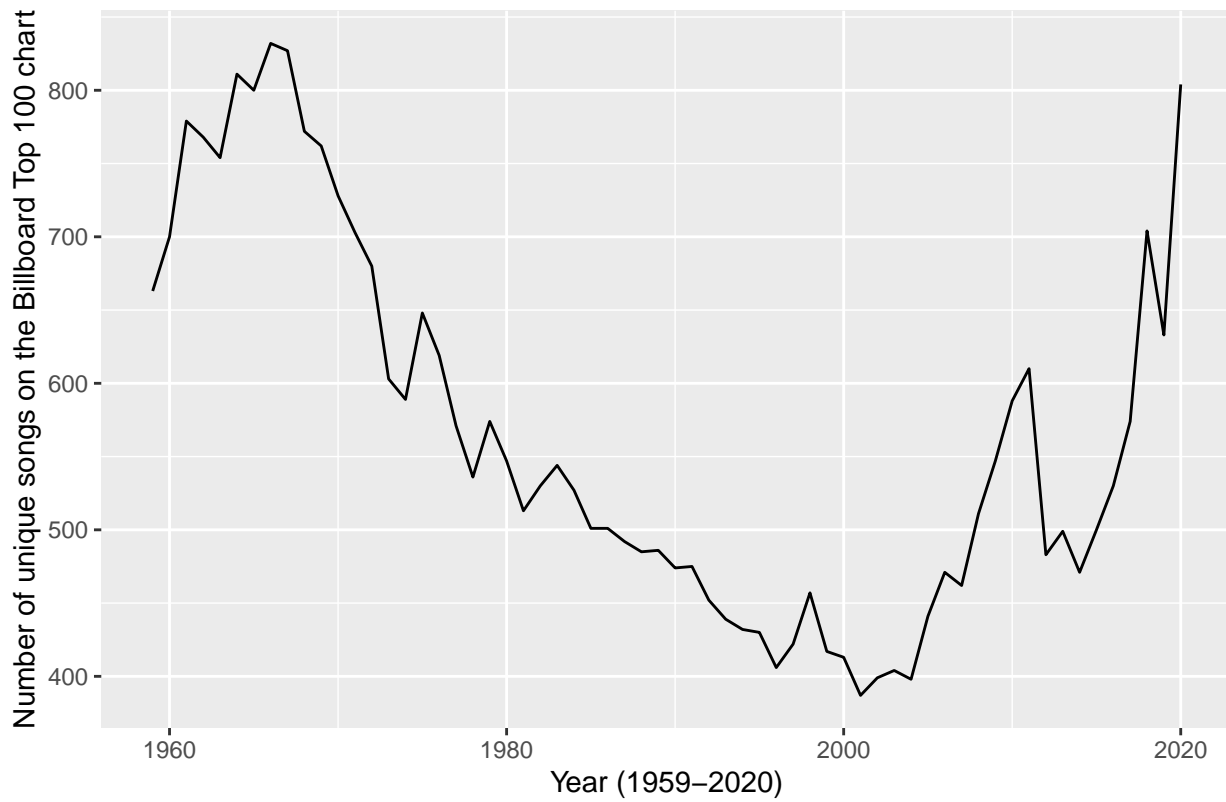
Problem 4: Wrangling the Billboard Top 100

Part A

```
## # A tibble: 10 x 3
## # Groups:   performer [10]
##   performer      song      count
##   <chr>         <chr>    <int>
## 1 Imagine Dragons Radioactive      87
## 2 AWOLNATION      Sail       79
## 3 Jason Mraz       I'm Yours    76
## 4 The Weeknd       Blinding Lights 76
## 5 LeAnn Rimes      How Do I Live  69
## 6 LMFAO Featuring Lauren Bennett & GoonRock Party Rock Anthem 68
## 7 OneRepublic      Counting Stars  68
## 8 Adele            Rolling In The Deep 65
## 9 Jewel            Foolish Games/You Were Meant~ 65
## 10 Carrie Underwood Before He Cheats  64
```

Part B

Musical Diversity over the years on the Billboard Top 100 chart



Part C

