To rerun my analysis for NYC Ferry Ridership, follow these steps:

- 1. Create a new R project and a new R or R Markdown file within the project you created
- 2. **Install Required Libraries:** Make sure you have the required R libraries tidyverse, fs, and RColorBrewer installed before running other commands
- 3. **Download and Import Data:** Download the <u>NYC Ferry Ridership</u> dataset from NYC Open Data and save it as "NYC\_Ferry\_Ridership.csv" in your R project. Then, run the code to import the dataset into R
- 4. **Prepare Data for Analysis:** The dataset contains information for weekdays and weekends. As the research focuses on weekday peak hours, filter out weekends from the dataset
- 5. **Aggregate Peak-Hour Ridership:** Calculate the average hourly ridership during morning (6-10 am) and evening (4-7 pm) peak hours for each weekday
- Create Trend Line Plots: Plot the trend of average hourly ridership during morning and
  evening peak hours over the six-year period using the geom\_smooth and geom\_vline in
  ggplot library (it comes with tidyverse)
- 7. **Filter and Visualize Individual Route Trends:** Analyze the trend of ridership during AM and PM rush hours for each individual NYC Ferry route using geom\_smooth and geom\_vline.
- 8. **Directional Pattern Analysis:** Analyze the directional pattern of each ferry route during morning and evening peak hours using stacked-bar plots (geom\_bar)
- Save the visualizations using the Export function in R: save as PDF with size 7" \* 5.28"