Practicing Data Wrangling with Tree Equity Data

Instructions

In this worksheet, you'll practice writing **tidyverse-style R code** for data wrangling tasks. Each question guides you through filtering, selecting, mutating, and summarizing the ca_tes dataset.

Don't stress yourself out over perfect syntax – the goal is to practice what you've learned about data wrangling so far

Practice Questions

1. Filter for neighborhoods with low tree equity scores

Show only neighborhoods where the tes (Tree Equity Score) is less than 50.

Hint: Use filter()

2. Focus on specific columns of interest

From the filtered data, keep only the following columns: treecanopy, tes, and unemplnorm.

Hint: Use select()

3. Calculate percent of tree coverage goal met

Compute a new column that represents the percent of the tree coverage goal that has been met.

Hint: Use mutate()

- You'll need to make an assumption about how to calculate this — discuss with a partner if unsure!

4. Compute average tree equity score by place

Group the data by place (city or neighborhood), and compute the average tes score in each one.

Hint: Use group_by() and summarise()

5. How does tree equity relate to both poverty and health disparity?

In this question, you'll explore the relationship between **Tree Equity Score (tes)**, **poverty**, and **health** disparity.

- Create a new variable called combined_index that combines pctpovnorm and health_nor.
- Cut the dataset down to just the relevant variables: place, combined_index, and tes.
- Organize the data so you can easily compare which places have the **highest combined index**.
 - Hint: Use arrange() to sort by the index in descending order

3. Tree Equity vs. Linguistic Isolation

Explore whether there's a relationship between linguistic isolation and tree equity in different areas.

- Use ggplot() to visualize the relationship between lingnorm (linguistic isolation) and tes
 - **Hint:** Choose the best type of plot for these two numerical variables.
- Add meaningful labels to your plot:
 - Use labs() to set an informative title and axis labels.