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1 - ---
2 title: "midvikudagsaefing6"
3 author: "Thor Sanchez"
4 date: "2024-03-13"
5 output: html_document
6 - ---
7
8 ```{r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
10 ```
11
12 ```{r}
13 library(tidyverse)
14 ```
15
16 #1
17 ```{r}
18 # Load the dataset and store it in an object with your initials
19 TS_dat <- read.csv("path/to/downloaded/spurningar_um_lifid_24.csv", sep = ";", dec = ",")
20 ```
21
22 #2
23 ```{r}
24 set.seed(37) # Set your favorite number here
25 TS_sample <- sample_n(TS_dat, 200)
26 ```
27
28 #3
29 ```{r}
30 ggplot(TS_sample, aes(x = travel_mode, y = travel_time)) +
31   geom_boxplot() +
32   xlab("Travel Mode") +
33   ylab("Travel Time") +
34   ggtitle("Travel Time by Mode of Travel")
35 ```
36
37 #4
38 ```{r}
39 travel_mode_counts <- TS_sample %>%
40   group_by(travel_mode) %>%
41   summarise(count = n()) %>%
42   filter(count >= 10)
43
44 # Filter the sample to exclude travel modes with fewer than 10 observations
45 TS_filtered <- TS_sample %>%
46   filter(travel_mode %in% travel_mode_counts$travel_mode)
47 ```
48
49 #5
50 ```{r}
51 # Assuming 'travel_time' is numeric and 'travel_mode' is the grouping variable
52 anova_result <- aov(travel_time ~ travel_mode, data = TS_filtered)
53 summary(anova_result)
54 ```
55
56 #6
57 ```{r}
58 # The same ANOVA analysis as in Task 5 can be discussed here
59 summary(anova_result)
60 ```
61
62 #7
63 ```{r}
64 TukeyHSD(anova_result)
65 ```
66
67 #8
68
69

```