DAPR1 Formative Report

Exam number B000001

Academic year 2025-26

1 Introduction

Write here your introduction.

2 Analysis

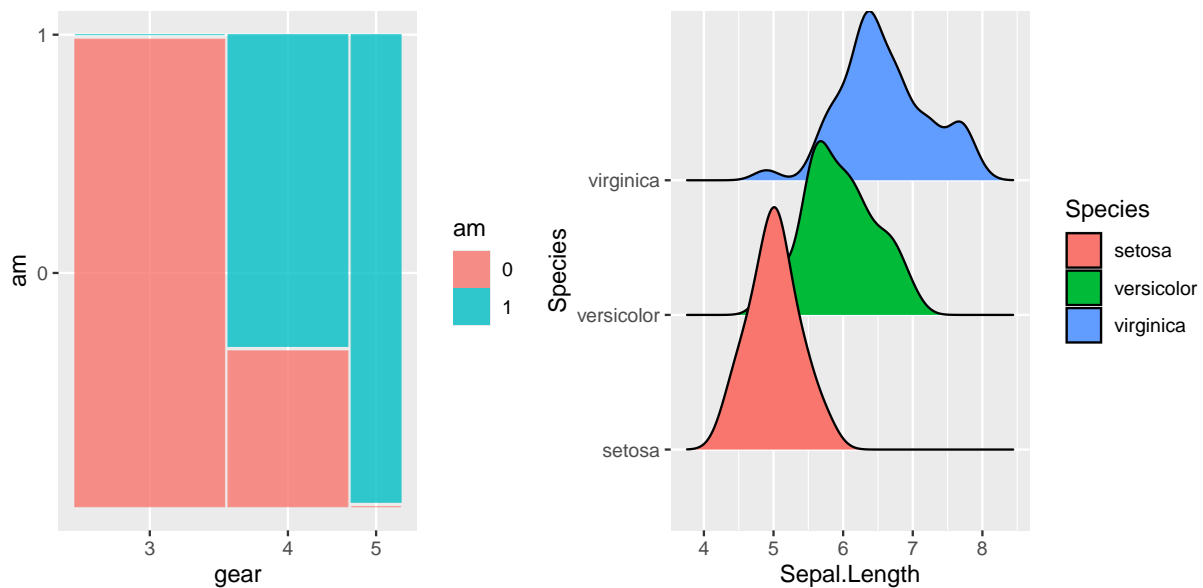Present here your figures/tables/results and provide write-ups of your results. See Figure 1.

Figure 1: My plots

3 Discussion

Summarise the key take-home findings among everything that was presented in the analysis section.

4 Appendix A: Additional figures and tables

Include here additional tables and figures, with captions, and properly referenced. These should be used somewhere in the text, do not include tables or figures which are not referenced anywhere in your writing. If you don't need Appendix A, remove it.

5 Appendix B: R code

Do not edit the code chunk below, but remove this paragraph of text before submitting.

```r
knitr::opts_chunk$set(echo = FALSE, message = FALSE, warning = FALSE)
# INSTALL TINYTEX TO ALLOW KNITTING TO PDF

# library(tinytex)
# tinytex::install_tinytex(force = TRUE)


# PACKAGES
library(tidyverse)
library(ggmosaic)
library(ggridges)
library(effectsize)
library(corrr)
library(patchwork)
library(broom)
library(psych)


# GGMOSAIC
mtcars <- mtcars |>
    mutate(am = factor(am),
           gear = factor(gear))
p.m <- ggplot(mtcars) +
    geom_mosaic(aes(x = product(am, gear), fill = am))
p.m


# GGRIDGES
p.r <- ggplot(iris, aes(x = Sepal.Length, y = Species, fill = Species)) +
    geom_density_ridges()
p.r


# PATCHWORK
p.m | p.r


# EFFECTSIZE
data <- iris |>
    filter(Species != "setosa") |>
    mutate(Species = fct_drop(Species))
```

```r
cohens_d(Sepal.Length ~ Species, data = data, pooled_sd = TRUE)


# CORRR
datasets::airquality %>%
  correlate() %>%
  network_plot(min_cor = .2)


# BROOM
tidy(t.test(Sepal.Length ~ Species, data = data))


# PSYCH
describe(data)


p.m | p.r
```