Homework1_STAT515

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Question 1: The data sets here consists of applications for admission to graduate study at the University of California, Berkeley for the Fall 1973. "Admission.csv" contains university level admission status and "Original_Admissions_Data.csv" contains admissions by each department.

1. Using GGplot create an appropriate graphic to show the university-level Admissions. (Hint: Female and male applications admitted and rejected (stacked bar plot (2 bars), admitted and rejected broken down by % male/female.) (Use Admissions.csv).

```
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.2 --
## v ggplot2 3.4.0      v purrr   1.0.1
## v tibble  3.1.8      v dplyr   1.1.0
## v tidyr   1.3.0      v stringr 1.5.0
## v readr   2.1.3      v forcats 1.0.0
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
source("/Users/mykola/Desktop/STAT515/third_lesson/hw.R")
```

```
admission = read_csv("Admission.csv")
```

```
## Rows: 4 Columns: 4
## -- Column specification ----------------------------------------------------
## Delimiter: ","
## chr (2): Gender, Admit
## dbl (2): Freq, Prop
##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```
table(is.na(admission))
```

```
##
## FALSE
##    16
```

```
ggplot(admission, aes( x=Admit, fill=Gender) )+
  geom_bar(color="black") +
  labs(x="Admitted/rejected students",
       y="Count",
       title="Admission Data Set",
       fill="Gender") + hw
```

Admission Data Set
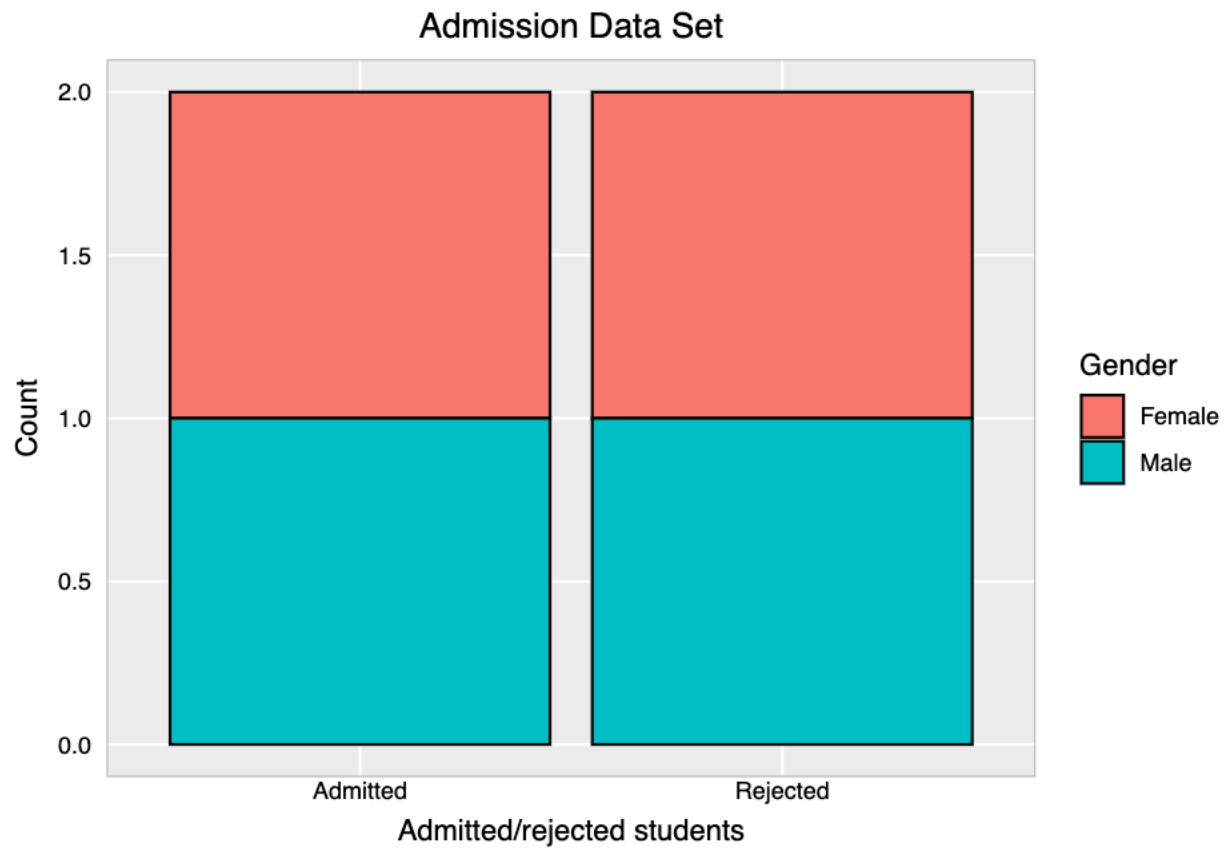
2. Assume admissions are conducted at the department level. Create an appropriate graphic to show the department level Admissions. (use Original_Admissions_Data.csv). (Hint: Let's look at %male/female for admitted and rejected applicants by department.)