## Tutorial 11 DSA2101pdf isit

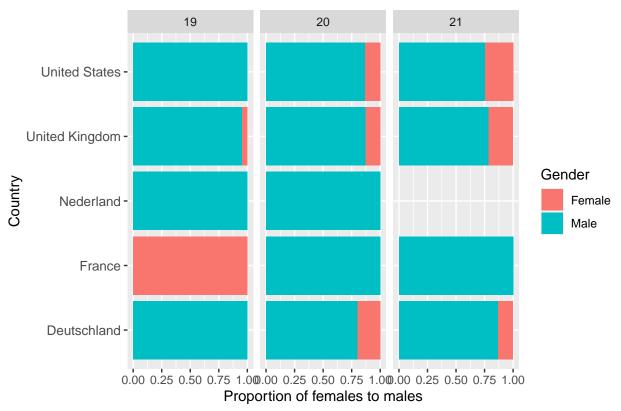
## Waseem

## 11/10/2021

```
## -- Attaching packages ------ tidyverse 1.3.1 --
## v ggplot2 3.3.5
                 v purrr 0.3.4
## v tibble 3.1.4
                  v dplyr
                          1.0.7
## v tidyr 1.1.3 v stringr 1.4.0
## v readr
         2.0.1 v forcats 0.5.1
## -- Conflicts ----- tidyverse conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()
                 masks stats::lag()
## Rows: 3532 Columns: 9
## Delimiter: ","
## chr (6): name, gender, dates, placeOfBirth, placeOfDeath, url
## dbl (3): id, yearOfBirth, yearOfDeath
## 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.
## Rows: 69201 Columns: 20
## -- Column specification ------
## Delimiter: ","
## chr (14): accession_number, artist, artistRole, title, dateText, medium, cre...
## dbl (6): id, artistId, year, acquisitionYear, height, depth
##
## 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.
## Warning: One or more parsing issues, see `problems()` for details
```

5. How is gender distribution over centuries in different country? Proportion of females increase over centuries in the countries United States, United Kingdom , Nederland and Deutschland, but decreases in France.

## Gender Distribution over centuries in different Countries



8. Over the years and centuries, has the gender proportion in artwork changed? As seen in the graph below, the proportion of females to males has increased over the years, especially since the 19th century.

