

Activity #14 — First QMD File

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1 two-way frequency table ()

```
library(dplyr); library(tidyr); library(knitr)

af_army_enl <- armed_forces %>%
  filter(branch == "Army", component == "Enlisted") %>%
  count(sex, rank_name, name = "n")

af_table <- af_army_enl %>%
  pivot_wider(names_from = rank_name, values_from = n, values_fill = 0L) %>%
  arrange(sex)

kable(af_table, caption = "Table 1. Army (Enlisted): Frequency of soldiers by Sex and Rank")
```

Counts of Army enlisted by sex across E1–E9. Most observations are in E4–E6, fewer at E1 and E9.

2 Popularity of Baby Names

Goal: Load **BabyNames**, filter to five names , and plot **2019–2024** as a time series.; facets separate sex (so not color-only).

3 wrangle

```
library(dcData); library(dplyr); library(tidyr)
data("BabyNames")

nm <- names(BabyNames)
if ("prop" %in% nm) val_col <- "prop" else
if ("n" %in% nm) val_col <- "n" else
val_col <- "count"

bn <- BabyNames |>
  rename(value = !val_col) |>
  mutate(year = as.integer(year))
```

```
chosen_names <- c("Olivia", "Emma", "Ava", "Liam", "Noah")  
bn_sel <- bn |>  
filter(name %in% chosen_names, year >= 2019, year <= 2024) |>  
group_by(year, sex, name) |>  
summarise(value = sum(value, na.rm = TRUE), .groups = "drop")
```

Why these names & what the lines show. I picked five very common names to keep the plot readable. Some stay steady; others drift.