# Week5 in-class assignment

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```
here() starts at C:/Users/anna_/OneDrive/Desktop/CHL8010/armed_conflict_vc
-- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
v dplyr
        1.1.4
                   v readr
                                2.1.5
v forcats 1.0.0
                   v stringr
                                1.5.1
v ggplot2 3.5.1
                   v tibble
                                3.2.1
                                1.3.1
v lubridate 1.9.3
                     v tidyr
           1.0.2
v purrr
-- Conflicts ----- tidyverse conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag()
                 masks stats::lag()
i Use the conflicted package (<a href="http://conflicted.r-lib.org/">http://conflicted.r-lib.org/</a>) to force all conflicts to become
Attaching package: 'table1'
The following objects are masked from 'package:base':
   units, units<-
```

## part 1

#### table 1

```
data_table <- finaldata |>
  group_by(country_name) |>
  mutate(
    ever_conflict = ifelse(sum(armconflict, na.rm = TRUE) > 0, "Ever", "Never")) |>
  ungroup()
```

```
data_country <- data_table |>
 group_by(country_name) |>
 summarise(
    gdp1000 = mean(gdp1000, na.rm = TRUE),
    #OECD = sum(OECD == 1, na.rm = TRUE),
    popdens = mean(popdens, na.rm = TRUE),
   urban = mean(urban, na.rm = TRUE),
   agedep = mean(agedep, na.rm = TRUE),
   male_edu = mean(male_edu, na.rm = TRUE),
   temp = mean(temp, na.rm = TRUE),
   rainfall1000 = mean(rainfall1000, na.rm = TRUE),
   #drought = sum(drought == 1, na.rm = TRUE),
   #earthquake = sum(earthquake == 1, na.rm = TRUE),
    ever_conflict = ifelse(sum(armconflict, na.rm = TRUE) > 0, "Ever", "Never"),
    ever_OECD = ifelse(sum(OECD, na.rm = TRUE) > 0, "Ever", "Never"),
    ever_drought = ifelse(sum(drought, na.rm = TRUE) > 0, "Ever", "Never"),
   ever_earthquake = ifelse(sum(earthquake, na.rm = TRUE) > 0, "Ever", "Never")
table1(~ gdp1000 + popdens + urban + agedep + male_edu + temp +
         rainfall1000 + ever_OECD + ever_drought + ever_earthquake | ever_conflict,
       data=data_country)
```

	Ever	Never	Overall
	(N=88)	(N=98)	(N=186)
$\mathrm{gdp}1000$			
Mean (SD)	5.37(9.71)	16.8 (19.4)	$11.4\ (16.5)$
Median [Min, Max]	1.95 [0.197, 49.4]	7.95 [0.365, 97.0]	4.18 [0.197, 97.0]
Missing	0 (0%)	1 (1.0%)	1 (0.5%)
popdens			
Mean (SD)	29.9(19.7)	31.2(21.3)	30.6 (20.5)
Median [Min, Max]		30.1 [0, 99.8]	26.5 [0, 99.8]
Missing	1 (1.1%)	0 (0%)	1 (0.5%)
urban			
Mean (SD)	$31.4\ (15.2)$	$30.1\ (19.6)$	30.7(17.6)
Median [Min, Max]	31.5 [3.33, 76.1]	30.4 [0.105, 92.6]	30.7 [0.105, 92.6]
Missing	1 (1.1%)	0 (0%)	1 (0.5%)
agedep			
Mean (SD)	$69.0\ (19.3)$	55.6 (14.8)	` ,
Median [Min, Max]	67.6 [33.8, 105]	51.1 [20.8, 98.1]	55.6 [20.8, 105]
$\mathrm{male\_edu}$			
Mean (SD)	7.03(2.83)	9.35(2.66)	8.26 (2.97)
Median [Min, Max]	7.14 [1.52, 12.7]	9.50 [2.76, 14.2]	8.39 [1.52, 14.2]
Missing	1 (1.1%)	0 (0%)	1 (0.5%)
temp			
Mean (SD)	21.5 (5.99)	$18.0 \ (8.04)$	$19.6 \ (7.34)$
Median [Min, Max]		19.7 [-0.627, 28.9]	
Missing	1 (1.1%)	0 (0%)	1 (0.5%)
rainfall1000			
Mean (SD)	$1.08 \ (0.752)$	$1.31\ (0.816)$	$1.20 \ (0.793)$
Median [Min, Max]		1.06 [0.0666, 3.49]	
Missing	1 (1.1%)	0 (0%)	1 (0.5%)
${ m ever}\_{ m OECD}$			
Ever	7~(8.0%)	28~(28.6%)	35~(18.8%)
Never	81 (92.0%)	$70 \ (71.4\%)$	$151 \ (81.2\%)$
$ever\_drought$			
Ever	58~(65.9%)	$48 \ (49.0\%)$	106 (57.0%)
Never	30 (34.1%)	50 (51.0%)	80 (43.0%)
${\it ever\_earthquake}$			
Ever	47~(53.4%)	34 (34.7%)	$81 \ (43.5\%)$
Never	41 (46.6%)	64 (65.3%)	105 (56.5%)

## Part 2

### descriptive figure

```
select_country <- finaldata |>
  dplyr::select(country_name, ISO, year, MatMor) |>
  dplyr::filter(year < 2018) |>
  arrange(ISO, year) |>
  group_by(ISO) |>
  mutate(diffmatmor = MatMor - MatMor[1L]) |>
  filter(year==2017 & diffmatmor > 0) |>
  select(country_name, ISO)
```

```
data_inc_matmor <- finaldata |>
  inner_join(select_country, by = "ISO")
```

```
data_inc_matmor |>
  ggplot(aes(x = year, y = MatMor, group = ISO)) +
  geom_line(aes(color = as.factor(ISO)), alpha = 0.5) +
  xlim(c(2000,2017)) +
  scale_y_continuous(trans='log10') +
  labs(y = "Maternal mortality", x = "Year", color = "ISO") +
  theme_bw()
```

Warning: Removed 26 rows containing missing values or values outside the scale range (`geom\_line()`).

