## Day 2

## **Vormittag**

```
library(tidyverse)
library(gapminder)
```

## **Tabellen**

```
gapminder
```

```
# A tibble: 1,704 x 6
  country
               continent year lifeExp
                                             pop gdpPercap
  <fct>
               <fct>
                         <int>
                                 <dbl>
                                                     <dbl>
                                           <int>
                                                      779.
1 Afghanistan Asia
                          1952
                                   28.8 8425333
2 Afghanistan Asia
                          1957
                                  30.3 9240934
                                                      821.
3 Afghanistan Asia
                          1962
                                  32.0 10267083
                                                      853.
4 Afghanistan Asia
                                  34.0 11537966
                                                      836.
                          1967
                                   36.1 13079460
5 Afghanistan Asia
                          1972
                                                      740.
6 Afghanistan Asia
                          1977
                                  38.4 14880372
                                                      786.
7 Afghanistan Asia
                          1982
                                  39.9 12881816
                                                      978.
                                  40.8 13867957
8 Afghanistan Asia
                          1987
                                                      852.
9 Afghanistan Asia
                          1992
                                  41.7 16317921
                                                      649.
10 Afghanistan Asia
                          1997
                                  41.8 22227415
                                                      635.
# ... with 1,694 more rows
  if (knitr::is_html_output()) {
    rmarkdown::paged_table(gapminder)
  } else {
    head(gapminder) |>
```

```
knitr::kable()
}
```

country	continent	year	life Exp	pop	$\operatorname{gdpPercap}$
Afghanistan	Asia	1952	28.801	8425333	779.4453
Afghanistan	Asia	1957	30.332	9240934	820.8530
Afghanistan	Asia	1962	31.997	10267083	853.1007
Afghanistan	Asia	1967	34.020	11537966	836.1971
Afghanistan	Asia	1972	36.088	13079460	739.9811
Afghanistan	Asia	1977	38.438	14880372	786.1134

what if we want to be able to comment out any line in a set of pipes?

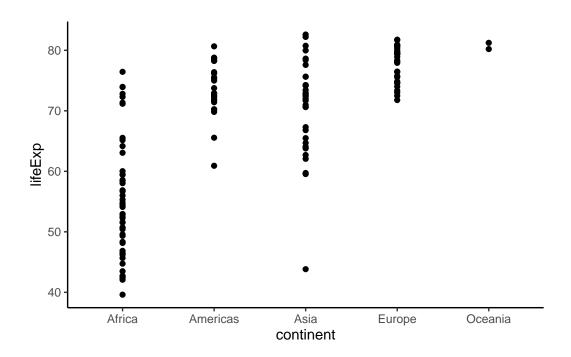
```
id <- function(x = NULL) x

gapminder |>
  filter(year == max(year)) |>
  group_by(continent) |>
  summarise(across(c(lifeExp, pop, gdpPercap), mean)) |>
  knitr::kable() |>
  id()
```

continent	lifeExp	pop	gdpPercap
Africa	54.80604	17875763	3089.033
Americas	73.60812	35954847	11003.032
Asia	70.72848	115513752	12473.027
Europe	77.64860	19536618	25054.482
Oceania	80.71950	12274974	29810.188

Or in a ggplot?

```
gapminder |>
  filter(year == max(year)) |>
  group_by(continent) |>
  ggplot(aes(continent, lifeExp)) +
  geom_point() +
  theme_classic() +
  coord_cartesian() +
```



## more advanced across

# A tibble: 5 x 10

```
continent lifeExp_mean lifeExp_median lifeExp_sum pop_mean pop_median pop_sum
  <fct>
                   <dbl>
                                   <dbl>
                                                <dbl>
                                                          <dbl>
                                                                      <dbl>
                                                                              <dbl>
1 Africa
                    54.8
                                    52.9
                                                2850.
                                                                             9.30e8
                                                         1.79e7
                                                                10093310.
2 Americas
                    73.6
                                    72.9
                                                1840.
                                                         3.60e7
                                                                  9319622
                                                                             8.99e8
3 Asia
                    70.7
                                    72.4
                                                2334.
                                                         1.16e8
                                                                 24821286
                                                                             3.81e9
4 Europe
                    77.6
                                    78.6
                                                2329.
                                                         1.95e7
                                                                  9493598
                                                                             5.86e8
5 Oceania
                    80.7
                                    80.7
                                                 161.
                                                         1.23e7 12274974.
                                                                             2.45e7
```

- # ... with 3 more variables: gdpPercap\_mean <dbl>, gdpPercap\_median <dbl>,
- # gdpPercap\_sum <dbl>

```
id = \(x) mean(x, na.rm = TRUE)
  ~ mean(.x, na.rm = TRUE)
function(.x) {
  mean(.x, na.rm = TRUE)
}

if (knitr::is_html_output()) {
  DT::datatable(gapminder)
}
```