

# Latihan 6

Alfain\_123190065

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```
library(dslabs)
library(tidyverse)

## -- 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 1.1.4        v stringr 1.4.0
## v readr 2.0.2        v forcats 0.5.1

## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()

data(murders)
```

## Nomor 1

```
murders_tibble <- as_tibble(murders)
```

## Nomor 2

```
murders %>% group_by(region)

## # A tibble: 51 x 5
## # Groups:   region [4]
##   state      abb region population total
##   <chr>      <chr> <fct>      <dbl> <dbl>
## 1 Alabama    AL   South     4779736  135
## 2 Alaska     AK   West       710231   19
## 3 Arizona    AZ   West     6392017  232
## 4 Arkansas   AR   South     2915918   93
## 5 California CA   West    37253956 1257
## 6 Colorado   CO   West     5029196   65
## 7 Connecticut CT   Northeast 3574097   97
## 8 Delaware   DE   South      897934   38
## 9 District of Columbia DC   South      601723   99
## 10 Florida    FL   South    19687653 669
## # ... with 41 more rows
```

### Nomor 3

```
murders$population %>% log() %>% mean() %>% exp()
```

```
## [1] 3675209
```

### Nomor 4

```
compute_s_n <- function(n){  
  x <- 1:n  
  data_frame(n = n, s_n = sum(x), s_n_2 = sum(x))  
}  
n <- 1:100  
map_df(n, compute_s_n)
```

```
## Warning: 'data_frame()' was deprecated in tibble 1.1.0.  
## Please use 'tibble()' instead.  
## This warning is displayed once every 8 hours.  
## Call 'lifecycle::last_warnings()' to see where this warning was generated.
```

```
## # A tibble: 100 x 3  
##       n    s_n s_n_2  
##   <int> <int> <int>  
## 1     1     1     1  
## 2     2     3     3  
## 3     3     6     6  
## 4     4    10    10  
## 5     5    15    15  
## 6     6    21    21  
## 7     7    28    28  
## 8     8    36    36  
## 9     9    45    45  
## 10    10    55    55  
## # ... with 90 more rows
```