class(murders$population)

#> [1] "numeric"

names(murders)

#> [1] "state" "abb" "region" "population" "total"

length(murders$population)

#> [1] 51

class(murders$state)

#> [1] "character"

levels(murders$region) #> [1] "Northeast" "South" "North Central" "West"

Factors Dalam dataset “murders”, variabel state yang berisi data karakter bukan bertipe vector: character, namun, tipe datanya adalah factor

class(murders$region)

#> [1] "factor"

**mat[2, 3]**

#> [1] 10

**mat <- matrix(1:12, 4, 3)**

**mat**

#> [,1] [,2] [,3]

#> [1,] 1 5 9

#> [2,] 2 6 10

#> [3,] 3 7 11

#> [4,] 4 8 12

**library(dslabs) data(murders) sort(murders$total)**

#> [1] 2 4 5 5 7 8 11 12 12 16 19 21 22

#> [14] 27 32 36 38 53 63 65 67 84 93 93 97 97

**x <- c(31, 4, 15, 92, 65)**

**sort(x)**

#> [1] 4 15 31 65 92

**ind <- order(murders$total)**

**murders$abb[ind]**

#> [1] "VT" "ND" "NH" "WY" "HI" "SD" "ME" "ID" "MT" "RI" "AK" "IA" "UT"

max(murders$total)

#> [1] 1257

**i\_max <- which.max(murders$total) murders$state[i\_max]** #> [1] "California"

x <- murders$population / 10^6

y <- murders$total

plot(x, y)

**x <- c(31, 4, 15, 92, 65) rank(x**) #> [1] 3 1 2 5 4

x <- with(murders, total / population \* 100000)

hist(x)

murders$state[which.max(x)] #> [1] "District of Columbia"

x <- matrix(1:120, 12, 10) image(x)

murders$rate <- with(murders, total / population \* 100000)

boxplot(rate~region, data = murders)

Ind <- which.min(murderrate)

If(murderrate[ind]<0.5{

Print(murders$state[ind])

} else{

Print(“GAADA”)}

Murders%>%

Arrange(region, rate)%>%

Head()

Murders%>%

Arrange(rate)%>%

Head()

Heights%>%group\_by(sex)

Heights%>%group\_by(sex)

s<-heights%>%

filter(sex==”female”)%>%

summarize(average=mean(height), stan\_dev=sd(height))

s

>average stan\_dev

>64.9 3.76

a<-0

ifelse(a>0, 1/a, NA)

avg<-fungction(x){

a<-sum(x)

n<-length(x)

s/n}

S<-3

Avg(1:10)

For(i in 1:5){

Print(i)

x<-1:10

sapply(x, sqrt)

>1 1.41 1.73 2 2.24 …

murders<-mutate(murders, rate=total/population\*10^5)

filter<-(murders, rate<=0.71)

New\_table<-select (murders, rate, state, region)

Filter(new\_table, rate<=0.71)

Murders%>% select(rate, state, region)%>%

Filter(rate<=0.71)

Murders%>%

Top\_n(5, rate)

x<-1:10

sqrt(x)

>1 1.41 1.73 2 2.24 …

Y<-1:10

X\*y

> 1 4 9 16 25 … 100

Tampilkan 10 data penyakit rubella teratas diurutkan berdasarkan jumlah kasusnya dan terjadi pada antara tahun

2000 dan 2005! point 11

A = us\_contagious\_diseases %>%

select(disease, state, count, year) %>%

filter(disease=="Rubella",year>=2000, year<=2005) %>%

arrange(desc(coun t)) head(A, n=10)

---------------------------------------------------------------------------------------------------------------------------------

data1 <- us\_contagious\_diseases biasa = data1 %>%

filter(count<500)

head(biasa, 10)

data1 <- us\_contagious\_diseases azab = data1 %>%

filter(count>500)

head(azab,10)

data1 <- us\_contagious\_diseases cobaan = data1 %>%

filter(count<=2000, count>=500)

head(cobaan,10)

---------------------------------------------------------------------------------------------------------------------------------

data1 <- us\_contagious\_diseases x <- data1 %>%

select(disease, state, year, weeks\_reporting, count, population) %>%

mutate(data1, kategori = ifelse(count < 500, "Biasa", ife lse(count > 2000, "Azab", "Cobaan"))) %>%

mutate(rate = (count / popula tion) \* 100000)

head(x,10)

---------------------------------------------------------------------------------------------------------------------------------

y <- x

z <- y %>%

group\_by(state) %>%

summarise(RataPerNegaraBagian = mean(rate))

head(z,10)

--------------------------------------------------------------------------------------------------------------------------------

visual <- boxplot(z, main="Boxplot state dan rata-rata pernegara bagian ", col = "cyan")