Penanganan data tabular

Penanganan data csv

```
getwd() # tahu di mana posisi kita saat ini
```

'/home/ronggolawe/coding_repo/tutorialStatdasR/notebooks'

```
setwd("/home/ronggolawe/coding_repo/tutorialStatdasR/notebooks") # mengatur posisi kita
```

```
getwd()
```

'/home/ronggolawe/coding_repo/tutorialStatdasR/notebooks'

```
# Membaca csv
data <- read.csv("../data/gaji.csv")
data
```

ID	NAMA	GAJI	JURUSAN
1	Petrus	1000000	Teologi
2	Matius	2000000	Filsafat
3	Markus	5000000	Meteorologi
4	Barnabas	10000000	Teknik Informatika
5	Thomas	20000000	Sistem Informasi
6	Ignatius	500000	Pendidikan Agama
7	Aisyah	25000000	Teknik Elektro
8	Supriyanto	1500000	Ilmu Perpustakaan

```
# menuliskan csv
head(mtcars)
```

	MPG	CYL	DISP	HP	DRAT	WT	QSEC	VS	AM	GEAR	CARB

	MPG	CYL	DISP	HP	DRAT	WT	QSEC	VS	AM	GEAR	CARB
Mazda RX4	21.0	6	160	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225	105	2.76	3.460	20.22	1	0	3	1

```
write.csv(mtcars, file = "../data/tes.csv")
```

```
class(data)
```

'data.frame'

```
# menuliskan csv dari data frame
c1 <- c(10,20,30,40,50)
c2 <- c('A', 'B', 'C', 'D', 'E')
df <- data.frame(c1,c2)
df
```

C1	C2
10	A
20	B
30	C
40	D
50	E

```
write.csv(df, file = '../data/tes2.csv')
```

```
# Untuk mengetahui secara lebih lanjut, perintahkan:
# help(read.csv)
```

Penanganan data excel

```
library(readxl) # memuat pustaka readxl
```

```
excel_sheets("../data/contoh.xlsx")
```

1. 'Sheet1'
2. 'Sheet2'

```
# membaca file excel
df <- read_excel("../data/contoh.xlsx", sheet = "Sheet1")
df
```

NO	NAMA DEPAN	NAMA BELAKANG	JENIS KELAMIN	NEGARA	USIA	ID
1	Fernando	Sanchez	Pria	Meksiko	28	1562
2	Sandy	Herho	Pria	Indonesia	27	1582
3	Mara	Hashimoto	Wanita	Jepang	25	2587
4	Philip	Gent	Pria	Belgia	32	2468
5	Satya	Narendra	Pria	India	42	6548
6	Vincenza	Welland	Wanita	Amerika Serikat	40	3598
7	Rudy	Salim	Pria	Indonesia	65	7865
8	Gaston	Brumm	Pria	Amerika Serikat	24	2456
9	Etta	Hurn	Wanita	Britania Raya	34	1785

```
summary(df)
```

```
       No     Nama Depan         Nama Belakang      Jenis
Kelamin
 Min.   :1   Length:9           Length:9
Length:9
 1st Qu.:3   Class :character   Class :character   Class
:character
 Median :5   Mode  :character   Mode  :character   Mode
:character
```

```
 Mean   :5

 3rd Qu.:7

 Max.   :9

    Negara               Usia             ID
 Length:9           Min.   :24.00   Min.   :1562
 Class :character   1st Qu.:27.00   1st Qu.:1785
 Mode  :character   Median :32.00   Median :2468
                    Mean   :35.22   Mean   :3383
                    3rd Qu.:40.00   3rd Qu.:3598
                    Max.   :65.00   Max.   :7865
```

```
str(df)
```

```
tibble [9 × 7] (S3: tbl_df/tbl/data.frame)
 $ No           : num [1:9] 1 2 3 4 5 6 7 8 9
 $ Nama Depan   : chr [1:9] "Fernando" "Sandy" "Mara"
"Philip" ...
 $ Nama Belakang: chr [1:9] "Sanchez" "Herho" "Hashimoto"
"Gent" ...
 $ Jenis Kelamin: chr [1:9] "Pria" "Pria" "Wanita" "Pria"
...
 $ Negara       : chr [1:9] "Meksiko" "Indonesia" "Jepang"
"Belgia" ...
 $ Usia         : num [1:9] 28 27 25 32 42 40 65 24 34
 $ ID           : num [1:9] 1562 1582 2587 2468 6548 ...
```

```
mean(df$Usia)
```

35.2222222222222

```
df1 <- read_excel("../data/contoh.xlsx", sheet='Sheet2')
df1
```

BILANGAN	KUADRAT
1	1
2	4
3	9
4	16

BILANGAN	KUADRAT
5	25

```
# menulis file excel
library(writexl)
```

```
c1 <- c(1:5)
c2 <- 6:10
df2 <- data.frame(c1,c2)
df2
```

C1	C2
1	6
2	7
3	8
4	9
5	10

```
write_xlsx(df2, "../data/tes.xlsx")
```