# Opdracht 3

Niek Scholten May 15, 2019

### Opdracht 1 Done

Opdracht 2 Bij session en dan bij working directory. of met:

#### getwd()

## [1] "/home/niek254/Documents/Thema4/Week 3/groepB-Niek-Scholten-opdracht3"

#### Opdracht 3

```
read.csv('Week3_opdracht2.csv', header = TRUE)
```

| ## |   | id | naam              | leeftijd | woonplaats | Inkomen |
|----|---|----|-------------------|----------|------------|---------|
| ## | 1 | 1  | Harrie            | 18       | Groningen  | 16344   |
| ## | 2 | 2  | Klaas             | 23       | Drachten   | 17000   |
| ## | 3 | 3  | Kees              | 44       | Leeuwarden | 45899   |
| ## | 4 | 4  | Shanita           | 36       | Assen      | 34500   |
| ## | 5 | 5  | ${\tt Charlotta}$ | 23       | Emmen      | 23456   |
| ## | 6 | 6  | Nanine            | 21       | Groningen  | 12876   |
| ## | 7 | 7  | Lema              | 67       | Groningen  | 34899   |
| ## | 8 | 8  | Jan               | 33       | Drachten   | 66799   |

Opdracht 4 Factoren zijn de gegevensobjecten die worden gebruikt om de gegevens te categoriseren en op te slaan als niveaus.

### $Opdracht\ 5$

```
read.csv('Week3_opdracht2.csv', header = TRUE)
```

```
naam leeftijd woonplaats Inkomen
##
    id
## 1 1
          Harrie
                       18 Groningen
                                       16344
## 2 2
           Klaas
                       23
                            Drachten
                                       17000
## 3 3
            Kees
                       44 Leeuwarden
                                       45899
## 4 4
         Shanita
                       36
                               Assen
                                       34500
## 5 5 Charlotta
                       23
                               Emmen
                                       23456
## 6 6
          Nanine
                       21 Groningen
                                       12876
## 7 7
            Lema
                       67
                           Groningen
                                       34899
## 8 8
             Jan
                       33
                            Drachten
                                       66799
```

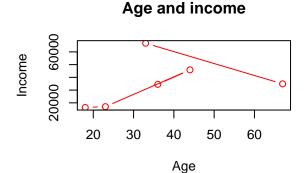
#### Opdracht 6

```
file = read.csv('Week3_opdracht6.csv', header = TRUE)
```

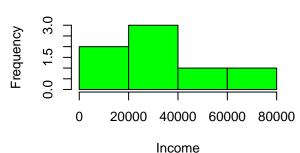
Er mist data in dit bestand.

# Opdracht 7

```
age = file[, 3]
income = file[, 5]
par(mfrow=c(2,2))
plot(age, income,
    type = "b",
     col = "Red",
    xlab = "Age",
    ylab = "Income",
    main = "Age and income")
hist(income,
    xlab = "Income",
    ylab = "Frequency",
    breaks = 2,
     col = "Green",
    main = "Income frequency")
boxplot(age,
       col = "Yellow",
        border = "Black",
        ylab = "Age",
       main = "Boxplot of age")
city = file[, 4]
plot(city,
    col ="Blue",
    ylab ="Frequency",
    ylim = c(0,4),
    las = 3,
    main = "Frequency per city")
```

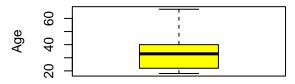


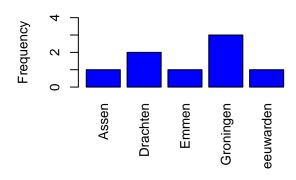
# Income frequency



# **Boxplot of age**

# Frequency per city





### Opdracht 8

## The average age is: 35

```
cat("| Rijen: ", nrow(file), "| Kolommen: ", ncol(file), " | ")

## | Rijen: 8 | Kolommen: 5 |

Opdracht 9

cat("The maximum income is: ", max(income, na.rm = TRUE), "\n")

## The maximum income is: 66799

cat("The minimum income is: ", min(income, na.rm = TRUE), "\n")

## The minimum income is: 16344

cat("The average income is: ", round(mean(income, na.rm = TRUE), 0), "\n\n")

## The average income is: 34128

cat("The maximum age is: ", max(age, na.rm = TRUE), "\n")

## The maximum age is: 67

cat("The minimum age is: ", min(age, na.rm = TRUE), "\n")

## The minimum age is: 18

cat("The average age is: ", round(mean(age, na.rm = TRUE), 0))
```

# Opdracht 10

# summary(file)

```
leeftijd
##
        id
                      naam
                                             woonplaats
## Min. :1.00
                         :1
                             Min. :18.00
                                           Assen
                                                  :1
## 1st Qu.:2.75
                             1st Qu.:22.00
                                           Drachten :2
                Charlotta:1
## Median :4.50
                Harrie :1
                             Median :33.00
                                           Emmen :1
## Mean :4.50
                             Mean :34.57
                                           Groningen:3
                 Jan
                         :1
## 3rd Qu.:6.25
                Klaas
                             3rd Qu.:40.00
                                           Leeuwarden:1
                         :1
## Max. :8.00
                             Max. :67.00
                Lema
                         :1
##
                 (Other) :2
                             NA's :1
##
      Inkomen
## Min. :16344
## 1st Qu.:20228
## Median :34500
## Mean :34128
## 3rd Qu.:40399
## Max. :66799
## NA's :1
```