Przekształcanie danych.

```r
df_BR <- readRDS('bank_register.rds')
head(df_BR, 10)
```

```
##        id          date       income demographic products
## 1   463_1 Jul 21, 2018 15.331,22$         F,37,0
## 2    12_2 Dec 20, 2018 29.326,10$         M,33,1
## 3     1_3 Dec 13, 2018 65.221,96$         M,74,3      DEP
## 4   368_4 Oct 15, 2018 92.897,54$         F,29,3      CRE
## 5   421_5 Jan 24, 2018 49.513,16$         F,64,0
## 6    14_6 Jun 19, 2018 95.417,87$         M,16,0  DEP,MOR
## 7   301_7 Nov 01, 2018 53.220,92$         M,40,0
## 8   491_8 May 30, 2018 15.651,98$         M,36,0  MOR,CRE
## 9   448_9 Oct 06, 2018 83.196,39$         F,20,2      MOR
## 10 884_10 Sep 11, 2018 90.831,43$         M,19,0  MOR,DEP
```

```r
df_BR$date <- as.Date(df_BR$date, format ='%b %d, %Y')

convert_income <- function(x) {
  x <- gsub("[,$]", "", x)
  x <- gsub(".", "", x, fixed = TRUE)
  x <- gsub(",", ".", x, fixed = TRUE)
  x <- as.numeric(x)
  return(x)
}

df_BR$income <- convert_income(df_BR$income)

split_data <- strsplit(as.character(df_BR$id), "_")
split_data2 <- strsplit(as.character(df_BR$demographic), ",")

df_split <- do.call(rbind, split_data)
df_split2 <- do.call(rbind, split_data2)

df_split <- as.data.frame(df_split, stringsAsFactors = FALSE)
df_split2 <- as.data.frame(df_split2, stringsAsFactors = FALSE)

colnames(df_split) <- c("client_ID", "agreement_ID")
colnames(df_split2) <- c("sex", "age", "child")

df_BR <- cbind(df_split, df_BR)
df_BR <- cbind(df_BR, df_split2)

df_BR <- df_BR[, !names(df_BR) %in% c("id")]
df_BR <- df_BR[, !names(df_BR) %in% c("demographic")]

df_BR$dep <- grepl("\\bDEP\\b", df_BR$products)
df_BR$cre <- grepl("\\bDRE\\b", df_BR$products)
df_BR$mor <- grepl("\\bMOR\\b", df_BR$products)

df_BR$dep <- ifelse(df_BR$dep, TRUE, FALSE)
df_BR$cre <- ifelse(df_BR$cre, TRUE, FALSE)
df_BR$mor <- ifelse(df_BR$mor, TRUE, FALSE)
```

```r
df_BR <- df_BR[, !names(df_BR) %in% c("products")]

head(df_BR, 10)
```

```
##    client_ID agreement_ID       date  income sex age child   dep   cre   mor
## 1        463            1 2018-07-21 1533122   F  37     0 FALSE FALSE FALSE
## 2         12            2 2018-12-20 2932610   M  33     1 FALSE FALSE FALSE
## 3          1            3 2018-12-13 6522196   M  74     3  TRUE FALSE FALSE
## 4        368            4 2018-10-15 9289754   F  29     3 FALSE FALSE FALSE
## 5        421            5 2018-01-24 4951316   F  64     0 FALSE FALSE FALSE
## 6         14            6 2018-06-19 9541787   M  16     0  TRUE FALSE  TRUE
## 7        301            7 2018-11-01 5322092   M  40     0 FALSE FALSE FALSE
## 8        491            8 2018-05-30 1565198   M  36     0 FALSE FALSE  TRUE
## 9        448            9 2018-10-06 8319639   F  20     2 FALSE FALSE  TRUE
## 10       884           10 2018-09-11 9083143   M  19     0  TRUE FALSE  TRUE
```