Filter_Select_Quiz.Rmd

eCornell

8/7/2024

Use these libraries and this data set for all questions:

```
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.5.1     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.1
## v purrr     1.0.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
Credit <- read.csv("credit_cards.csv")
```

CQ1: Use the filter() function to keep only those individuals who are under 50 years old in the Credit data set. Assign the new data set to an object called CQ1.

```
Credit <- read.csv("credit_cards.csv")
CQ1 <- filter(Credit, Age < 50)
head(CQ1)
```

```
##   ID  Income Limit Rating Cards Age Education Student Married Balance
## 1  1  14.891  3606    283     2  34        11      No     Yes     333
## 2  4 148.924  9504    681     3  36        11      No      No     964
## 3  7  20.996  3388    259     2  37        12      No      No     203
## 4 10  71.061  6819    491     3  41        19     Yes     Yes    1350
## 5 11  63.095  8117    589     4  30        14      No     Yes    1407
## 6 14  43.682  6922    511     1  49         9      No     Yes    1081
```

CQ2: Use the filter() function to keep only those individuals who have more than one credit card and are not a student. Assign the new data set to an object called CQ2.

```
Credit <- read.csv("credit_cards.csv")
CQ2 <- filter(Credit, Student == 'No' & Cards >= 2)
head(CQ2)
```

```
##   ID  Income Limit Rating Cards Age Education Student Married Balance
## 1  1  14.891  3606    283     2  34        11      No     Yes     333
## 2  3 104.593  7075    514     4  71        11      No      No     580
## 3  4 148.924  9504    681     3  36        11      No      No     964
## 4  5  55.882  4897    357     2  68        16      No     Yes     331
## 5  6  80.180  8047    569     4  77        10      No      No    1151
## 6  7  20.996  3388    259     2  37        12      No      No     203
```

CQ3: Use the filter() function to keep only those individuals who have a credit rating above 350 or an income greater than $45,000 (recall that income is measured in units of $1,000). Assign the new data set to an object called CQ3.

```
Credit <- read.csv("credit_cards.csv")
CQ3 <- filter(Credit, Rating > 350 | Income > 45)
head(CQ3)
```

```
##   ID  Income Limit Rating Cards Age Education Student Married Balance
## 1  2 106.025  6645    483     3  82        15     Yes     Yes     903
## 2  3 104.593  7075    514     4  71        11      No      No     580
## 3  4 148.924  9504    681     3  36        11      No      No     964
## 4  5  55.882  4897    357     2  68        16      No     Yes     331
## 5  6  80.180  8047    569     4  77        10      No      No    1151
## 6  8  71.408  7114    512     2  87         9      No      No     872
```

CQ4: Use the select() function to remove the Married variable from the Credit data set. Assign the new data set to an object called CQ4.

```
Credit <- read.csv("credit_cards.csv")
CQ4 <- select(Credit, -c(Married))
head(CQ4)
```

```
##   ID  Income Limit Rating Cards Age Education Student Balance
## 1  1  14.891  3606    283     2  34        11      No     333
## 2  2 106.025  6645    483     3  82        15     Yes     903
## 3  3 104.593  7075    514     4  71        11      No     580
## 4  4 148.924  9504    681     3  36        11      No     964
## 5  5  55.882  4897    357     2  68        16      No     331
## 6  6  80.180  8047    569     4  77        10      No    1151
```

CQ5: Use the select() function to keep only the Limit, Cards, and Balance variables in the Credit data set. Assign the new data set to an object called CQ5.

```
Credit <- read.csv("credit_cards.csv")
CQ5 <- select(Credit, c(Limit,Cards,Balance))
head(CQ5)
```

```
##   Limit Cards Balance
## 1  3606     2     333
## 2  6645     3     903
## 3  7075     4     580
## 4  9504     3     964
## 5  4897     2     331
## 6  8047     4    1151
```