Cereales

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```
# install.packages("readxl")
library(readxl)
## Warning: package 'readxl' was built under R version 4.4.3
library(dplyr)
## Warning: package 'dplyr' was built under R version 4.4.3
## Adjuntando el paquete: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
cereal <- read_excel("cereal.xlsx")</pre>
head(cereal)
## # A tibble: 6 x 10
##
                   company serving calories
     name
                                               fat sodium carbs fiber sugars protein
     <chr>>
                   <chr>
                              <dbl>
                                       <dbl> <dbl>
                                                    <dbl> <dbl> <dbl>
                                                                        <dbl>
                                                                                <dbl>
                                                                                  1
## 1 AppleJacks
                               1
                                         117
                                               0.6
                                                      143
                                                              27
                                                                   0.5
                                                                         15
## 2 Boo Berry
                   G
                                         118
                                               0.8
                                                      211
                                                              27
                                                                   0.1
                                                                         14
                              1
                                                                                  1
## 3 Cap'n Crunch Q
                              0.75
                                         144
                                               2.1
                                                      269
                                                              31
                                                                   1.1
                                                                         16
                                                                                  1.3
## 4 Cinnamon Toa~ G
                              0.75
                                         169
                                               4.4
                                                      408
                                                              32
                                                                   1.7
                                                                         13.3
                                                                                  2.7
## 5 Cocoa Blasts Q
                              1
                                         130
                                               1.2
                                                      135
                                                              29
                                                                   0.8
                                                                         16
                                                                                  1
## 6 Cocoa Puffs
                              1
                                         117
                                               1
                                                      171
                                                              26
                                                                   0.8
                                                                         14
                                                                                  1
Q1
cereal[1:10, ]
```

```
## # A tibble: 10 x 10
##
                  company serving calories
                                             fat sodium carbs fiber sugars protein
     name
                  <chr>
                            <dbl>
##
     <chr>
                                     <dbl> <dbl> <dbl> <dbl> <dbl> <
                                                                     <dbl>
## 1 AppleJacks K
                             1
                                             0.6
                                                                0.5
                                                                               1
                                       117
                                                    143
                                                           27
                                                                      15
## 2 Boo Berry
                  G
                                       118
                                             0.8
                                                    211
                                                           27
                                                                0.1
                                                                      14
## 3 Cap'n Crunch Q
                             0.75
                                       144
                                             2.1
                                                    269
                                                           31
                                                                1.1
                                                                      16
                                                                               1.3
## 4 Cinnamon To~ G
                             0.75
                                       169
                                             4.4
                                                    408
                                                                1.7
                                                                      13.3
                                                                               2.7
## 5 Cocoa Blasts Q
                                             1.2
                                       130
                                                    135
                                                           29
                                                                0.8
                                                                      16
                             1
                                                                               1
## 6 Cocoa Puffs G
                             1
                                       117
                                             1
                                                    171
                                                           26
                                                                0.8
                                                                      14
## 7 Cookie Crisp G
                                       117
                                             0.9
                                                    178
                                                           26
                                                                0.5
                                                                      13
                                                                               1
                             1
## 8 Corn Flakes K
                             1
                                       101
                                             0.1
                                                    202
                                                           24
                                                                0.8
                                                                      3
## 9 Corn Pops
                                       117
                                             0.2
                                                    120
                                                                0.3
                  K
                             1
                                                           28
                                                                      15
                                                                               1
## 10 Crispix
                             1
                                       113
                                             0.3
                                                    229
                                                                0.1
                  K
                                                           26
```

$\mathbf{Q2}$

```
# data frane
Kelloggs <- cereal[cereal$company == "K",]
head(Kelloggs)</pre>
```

```
## # A tibble: 6 x 10
##
                   company serving calories
                                              fat sodium carbs fiber sugars protein
##
     <chr>>
                   <chr>
                            <dbl>
                                      <dbl> <dbl> <dbl> <dbl> <dbl> <
                                                                      <dbl>
## 1 AppleJacks
                                 1
                                       117
                                              0.6
                                                     143
                                                            27
                                                                 0.5
                                                                         15
                                                                                  1
## 2 Corn Flakes
                  K
                                        101
                                              0.1
                                                     202
                                                            24
                                                                 0.8
                                                                          3
                                                                                  2
                                 1
                                                                 0.3
                                                                                  1
## 3 Corn Pops
                  K
                                 1
                                        117
                                              0.2
                                                     120
                                                            28
                                                                         15
                                                                                  2
## 4 Crispix
                                       113
                                              0.3
                                                     229
                                                            26
                                                                 0.1
                  K
                                1
                                                                         3
## 5 Froot Loops
                                       118
                                              0.9
                                                     150
                                                            26
                                                                 0.8
                                                                         12
                                                                                  2
                  K
                                1
## 6 Frosted Mini~ K
                                 1
                                        175
                                              0.8
                                                     5
                                                            41
                                                                 5
                                                                         10
                                                                                  5
```

$\mathbf{Q3}$

cereal[cereal\$sugars > 10, "name"]

```
## # A tibble: 17 x 1
##
     name
##
      <chr>
## 1 AppleJacks
## 2 Boo Berry
## 3 Cap'n Crunch
## 4 Cinnamon Toast Crunch
## 5 Cocoa Blasts
## 6 Cocoa Puffs
## 7 Cookie Crisp
## 8 Corn Pops
## 9 Froot Loops
## 10 Golden Grahams
## 11 Honey Nut Clusters
## 12 Honey Nut Heaven
## 13 Lucky Charms
## 14 Raisin Bran
```

```
## 15 Reese's Puffs
## 16 Rice Krispie Treats
## 17 Smart Start
```

 $\mathbf{Q4}$

```
mean(cereal$calories)
```

[1] 133.8333

 Q_5

```
subset(cereal, fiber >= 2)
```

```
## # A tibble: 10 x 10
##
                   company serving calories
                                               fat sodium carbs fiber sugars protein
##
      <chr>
                   <chr>
                             <dbl>
                                       <dbl> <dbl>
                                                    <dbl> <dbl> <dbl>
                                                                        <dbl>
                                                                                <dbl>
                                                                                  1.3
## 1 Crunchy Bran Q
                               0.75
                                         120
                                               1.3
                                                      309
                                                             31
                                                                   6.4
                                                                          8
##
   2 Frosted Min~ K
                               1
                                         175
                                               0.8
                                                        5
                                                             41
                                                                   5
                                                                         10
                                                                                  5
   3 Honey Nut C~ G
                               1
                                         214
                                               2.7
                                                      249
                                                             46
                                                                   2.8
                                                                         17
                                                                                  4
##
  4 Honey Nut H~ Q
                                         192
                                               3.7
                                                      216
                                                                   3.5
                                                                         13
                                                                                  4
                                                             38
                               1
##
   5 Life
                               0.75
                                         160
                                               1.9
                                                      219
                                                             33
                                                                   2.7
                                                                          8
                                                                                  4
## 6 Multi-Grain~ G
                                         108
                                               1.2
                                                      201
                                                                   2.8
                                                                          6
                                                                                  2
                               1
                                                             24
## 7 Raisin Bran K
                              1
                                         195
                                               1.6
                                                      362
                                                             47
                                                                  7.3
                                                                         20
                                                                                  5
## 8 Smart Start K
                               1
                                         182
                                               0.7
                                                      275
                                                             43
                                                                   2.8
                                                                         14
                                                                                  4
## 9 Total
                   G
                              0.75
                                         129
                                               0.9
                                                      256
                                                             31
                                                                   3.7
                                                                          6.7
                                                                                  4
## 10 Wheaties
                   G
                                         107
                                                                                  3
                               1
                                               1
                                                      218
                                                             24
                                                                   3
                                                                          4
```