My first R Markdown script

Your name

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Contents

1. Prepare to work

1.1 Set the working directory

Refer to Section 1.2 for this, Part 3.1.

1.2 Load the libraries

```
library(dplyr)
```

1.3 Load the data

```
data <- read.csv("~/Fake/GACTT_RESULTS_ANONYMIZED_v2.csv", header=TRUE)
```

2. Preliminary observations and preparation of the data

2.1 Preliminary descriptive statistics

```
## head(data, 5) ## Code not run because too lengthy
## str(data) ## Code not run because too lengthy
## summary(data) ## Code not run because too lengthy
```

2.2 Transformation of the data

2.2.1 Change of class

```
data$What.is.your.age. <- as.factor(data$What.is.your.age.)
data$How.many.cups.of.coffee.do.you.typically.drink.per.day. <- as.factor(data$How.many.cups.of.coffee.
data$Where.do.you.typically.drink.coffee. <- as.factor(data$Where.do.you.typically.drink.coffee.)
## summary(data) ## Code not run because too lengthy
```

```
levels(data$What.is.your.age.)
```

```
## [1] ""                "<18 years old"   ">65 years old"   "18-24 years old"
## [5] "25-34 years old" "35-44 years old" "45-54 years old" "55-64 years old"
```

```
levels(data$How.many.cups.of.coffee.do.you.typically.drink.per.day.)
```

```
## [1] ""            "1"           "2"           "3"           "4"
## [6] "Less than 1" "More than 4"
```

```
levels(data$Where.do.you.typically.drink.coffee.)
```

```
##  [1] ""
##  [2] "At a cafe"
##  [3] "At a cafe, At home"
##  [4] "At a cafe, At home, At the office"
##  [5] "At a cafe, At home, At the office, On the go"
##  [6] "At a cafe, At home, On the go"
##  [7] "At a cafe, At home, On the go, At the office"
##  [8] "At a cafe, At the office"
```

```
##  [9] "At a cafe, At the office, At home"
## [10] "At a cafe, At the office, At home, On the go"
## [11] "At a cafe, At the office, On the go"
## [12] "At a cafe, At the office, On the go, At home"
## [13] "At a cafe, On the go"
## [14] "At a cafe, On the go, At home"
## [15] "At a cafe, On the go, At home, At the office"
## [16] "At a cafe, On the go, At the office"
## [17] "At home"
## [18] "At home, At a cafe"
## [19] "At home, At a cafe, At the office"
## [20] "At home, At a cafe, At the office, On the go"
## [21] "At home, At a cafe, On the go"
## [22] "At home, At a cafe, On the go, At the office"
## [23] "At home, At the office"
## [24] "At home, At the office, At a cafe"
## [25] "At home, At the office, At a cafe, On the go"
## [26] "At home, At the office, On the go"
## [27] "At home, At the office, On the go, At a cafe"
## [28] "At home, None of these"
## [29] "At home, On the go"
## [30] "At home, On the go, At a cafe"
## [31] "At home, On the go, At a cafe, At the office"
## [32] "At home, On the go, At the office"
## [33] "At home, On the go, At the office, At a cafe"
## [34] "At the office"
## [35] "At the office, At a cafe"
## [36] "At the office, At a cafe, At home"
## [37] "At the office, At a cafe, At home, On the go"
## [38] "At the office, At a cafe, On the go"
## [39] "At the office, At a cafe, On the go, At home"
## [40] "At the office, At home"
## [41] "At the office, At home, At a cafe"
## [42] "At the office, At home, At a cafe, On the go"
## [43] "At the office, At home, On the go"
## [44] "At the office, At home, On the go, At a cafe"
## [45] "At the office, On the go"
## [46] "At the office, On the go, At a cafe"
## [47] "At the office, On the go, At a cafe, At home"
## [48] "At the office, On the go, At home"
## [49] "At the office, On the go, At home, At a cafe"
## [50] "None of these"
## [51] "None of these, At a cafe"
## [52] "On the go"
## [53] "On the go, At a cafe"
## [54] "On the go, At a cafe, At home"
## [55] "On the go, At a cafe, At home, At the office"
## [56] "On the go, At a cafe, At the office"
## [57] "On the go, At a cafe, At the office, At home"
## [58] "On the go, At home"
## [59] "On the go, At home, At a cafe"
## [60] "On the go, At home, At a cafe, At the office"
## [61] "On the go, At home, At the office"
## [62] "On the go, At home, At the office, At a cafe"
```

```
## [63] "On the go, At the office"
## [64] "On the go, At the office, At a cafe, At home"
## [65] "On the go, At the office, At home"
## [66] "On the go, At the office, At home, At a cafe"
```

2.2.2 Data selection

```
data2 <- data[,c("Submission.ID",
                 "What.is.your.age.",
                 "How.many.cups.of.coffee.do.you.typically.drink.per.day.",
                 "Where.do.you.typically.drink.coffee.")]
```

```
data2 <- subset(data2, What.is.your.age. != "")
data2$What.is.your.age. <- droplevels(data2$What.is.your.age.)

data2 <- subset(data2, How.many.cups.of.coffee.do.you.typically.drink.per.day. != "")
data2$How.many.cups.of.coffee.do.you.typically.drink.per.day. <- droplevels(data2$How.many.cups.of.coff
```

3. Summarize and plot the data

3.1 Create summary table

```
data3 <- data2 %>%
  group_by(What.is.your.age., How.many.cups.of.coffee.do.you.typically.drink.per.day.) %>%
  summarize(Count = n())
```

```
## `summarise()` has grouped output by 'What.is.your.age.'. You can override using
## the `.groups` argument.
```

```
data3
```

```
## # A tibble: 40 x 3
## # Groups:   What.is.your.age. [7]
##    What.is.your.age. How.many.cups.of.coffee.do.you.typically.drink.per.~1 Count
##    <fct>             <fct>                                                 <int>
##  1 <18 years old     1                                                         6
##  2 <18 years old     2                                                         7
##  3 <18 years old     3                                                         1
##  4 <18 years old     Less than 1                                               5
##  5 >65 years old     1                                                        21
##  6 >65 years old     2                                                        37
##  7 >65 years old     3                                                        17
##  8 >65 years old     4                                                         7
##  9 >65 years old     Less than 1                                               5
## 10 >65 years old     More than 4                                               7
## # i 30 more rows
## # i abbreviated name:
## #   1: How.many.cups.of.coffee.do.you.typically.drink.per.day.
```

```
str(data3)
```

```
## gropd_df [40 x 3] (S3: grouped_df/tbl_df/tbl/data.frame)
##  $ What.is.your.age.                                    : Factor w/ 7 levels "<18 years old",..: 1
##  $ How.many.cups.of.coffee.do.you.typically.drink.per.day.: Factor w/ 6 levels "1","2","3","4",..: 1
##  $ Count                                                : int [1:40] 6 7 1 5 21 37 17 7 5 7 ...
##  - attr(*, "groups")= tibble [7 x 2] (S3: tbl_df/tbl/data.frame)
##   ..$ What.is.your.age.: Factor w/ 7 levels "<18 years old",..: 1 2 3 4 5 6 7
##   ..$ .rows            : list<int> [1:7]
##   .. ..$ : int [1:4] 1 2 3 4
##   .. ..$ : int [1:6] 5 6 7 8 9 10
##   .. ..$ : int [1:6] 11 12 13 14 15 16
##   .. ..$ : int [1:6] 17 18 19 20 21 22
##   .. ..$ : int [1:6] 23 24 25 26 27 28
##   .. ..$ : int [1:6] 29 30 31 32 33 34
##   .. ..$ : int [1:6] 35 36 37 38 39 40
##   .. ..@ ptype: int(0)
##   ..- attr(*, ".drop")= logi TRUE
```

3.2 Change the order of the factors

```
levels(data3$What.is.your.age.)
```

```
## [1] "<18 years old"   ">65 years old"   "18-24 years old" "25-34 years old"
## [5] "35-44 years old" "45-54 years old" "55-64 years old"
```

```
data3$What.is.your.age. <- factor(data3$What.is.your.age., levels = c("<18 years old",
                                                                       "18-24 years old",
                                                                       "25-34 years old",
                                                                       "35-44 years old",
                                                                       "45-54 years old",
                                                                       "55-64 years old",
                                                                       ">65 years old"))
levels(data3$What.is.your.age.)
```

```
## [1] "<18 years old"   "18-24 years old" "25-34 years old" "35-44 years old"
## [5] "45-54 years old" "55-64 years old" ">65 years old"
```

```
levels(data3$How.many.cups.of.coffee.do.you.typically.drink.per.day.)
```

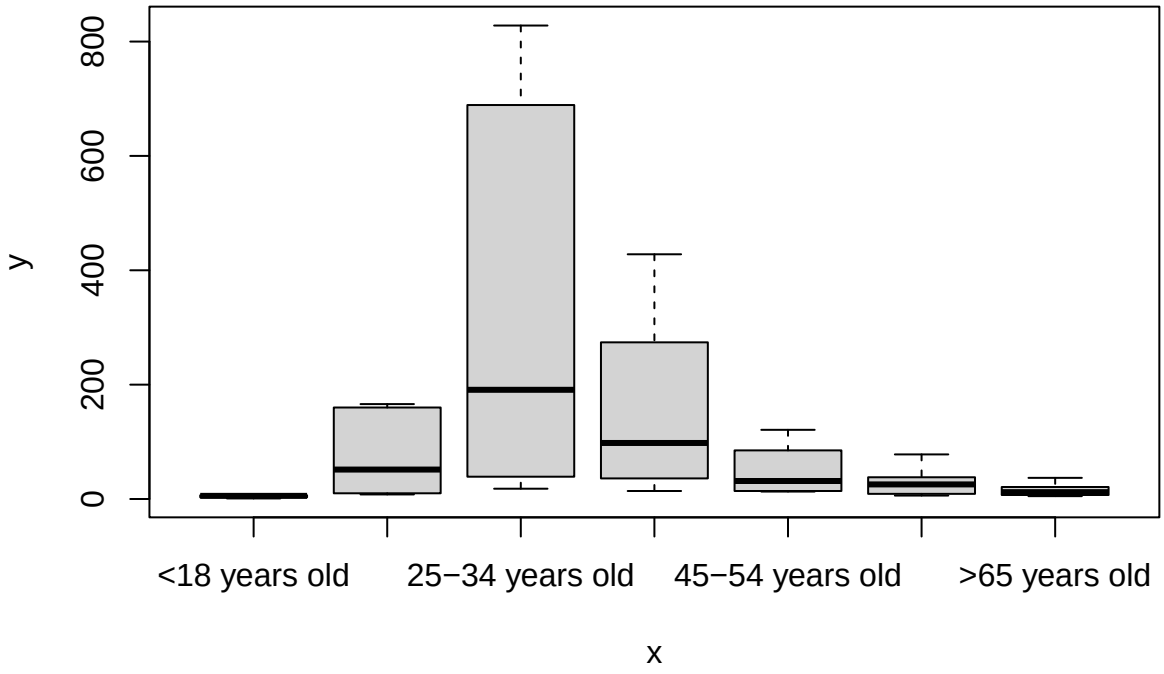
```
## [1] "1"           "2"           "3"           "4"           "Less than 1"
## [6] "More than 4"
```

```
data3$How.many.cups.of.coffee.do.you.typically.drink.per.day. <- factor(data3$How.many.cups.of.coffee.d
                                                                        "1",
                                                                        "2",
                                                                        "3",
                                                                        "4",
                                                                        "More than 4"))
levels(data3$How.many.cups.of.coffee.do.you.typically.drink.per.day.)
```

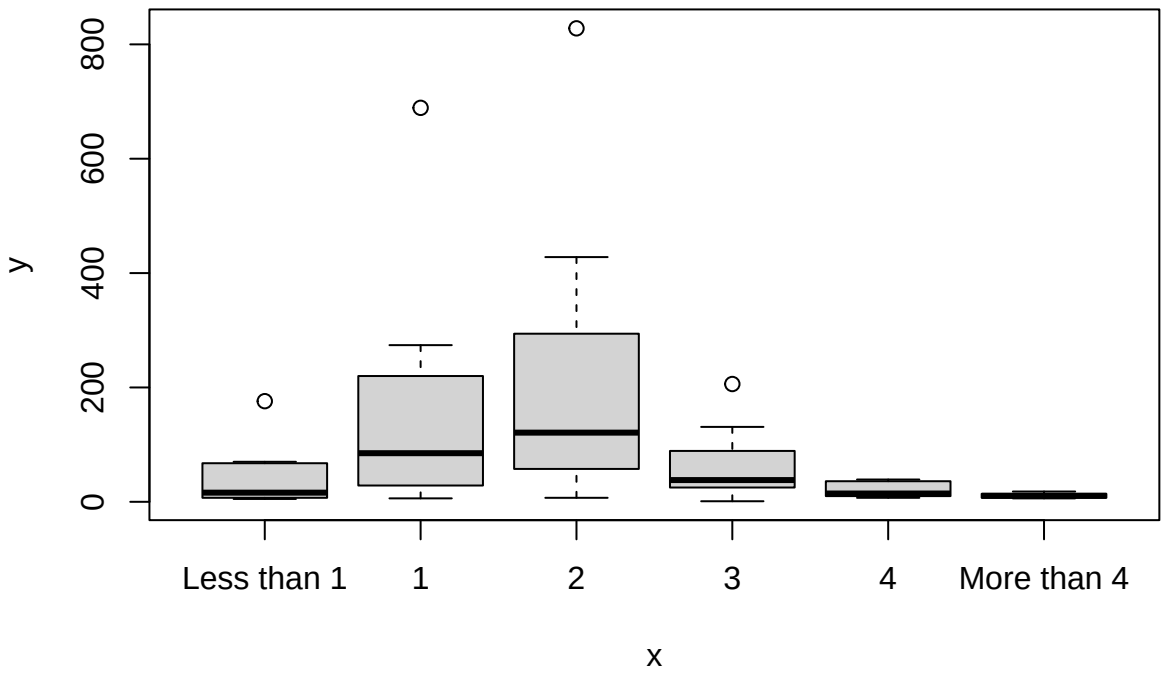
```
## [1] "Less than 1" "1"           "2"           "3"           "4"
## [6] "More than 4"
```

3.3 Plot the data

```
plot(x = data3$What.is.your.age., y = data3$Count)
```




```
plot(x = data3$How.many.cups.of.coffee.do.you.typically.drink.per.day., y = data3$Count)
```



4. Save the data

4.1 Save as an R object

```
save(data3, file = "data.Rdata")
```

4.2 Save as a CSV document

```
write.csv(data3, "data3.csv", row.names = FALSE)
```