My elaborated analysis

Martin Hinz

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1 Analyses

1.1 First function

For doubling the number, you might use the function 'double_me'.

```
library(coursepackageberlin)
a <- 2
double_me(a)
```

```
## [1] 4
```

See this visual (1):

2 Challenge

1. simple table and plot
2. add captions and crossref to those
3. add bib file and cite
4. Add second simple function to R/
5.
   - test
6. pass tests

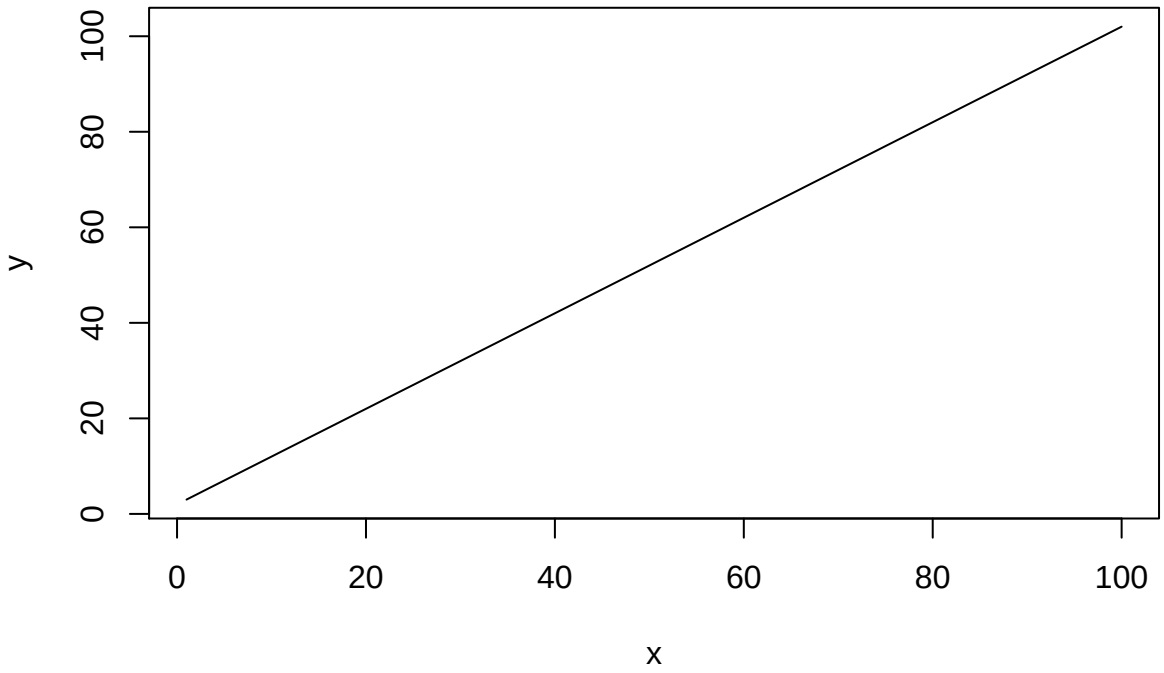

Figure 1: A figure caption.

3 Solution

We simulate a number of characters:

```
my_letters <- sample(letters, size = 500, replace = T)
```

now we table that

```
table(my_letters)
```

```
## my_letters
##  a  b  c  d  e  f  g  h  i  j  k  l  m  n  o  p  q  r  s  t  u  v  w  x  y
## 19 25 19 23 17 24 15 25 19 17 31 25 25 23 15 19 21 11 18 15 14 15 23 12 16
##  z
## 14
```

and in more beautiful

```
knitr::kable(as.data.frame(table(my_letters)), caption = "Letter frequency table")
```

and plot frequency

```
my_plot_letters <- table(my_letters)
barplot(my_plot_letters)
```

see solution table (1) and figure (2). for more information consult (R Core Team 2016).

Sampling letters can also be archieved by a function:

```
my_new_letters <- sample_letters(50)
```

We can use that to make a lorem ipsum

Table 1: Letter frequency table

my_letters	Freq
a	19
b	25
c	19
d	23
e	17
f	24
g	15
h	25
i	19
j	17
k	31
l	25
m	25
n	23
o	15
p	19
q	21
r	11
s	18
t	15
u	14
v	15
w	23
x	12
y	16
z	14

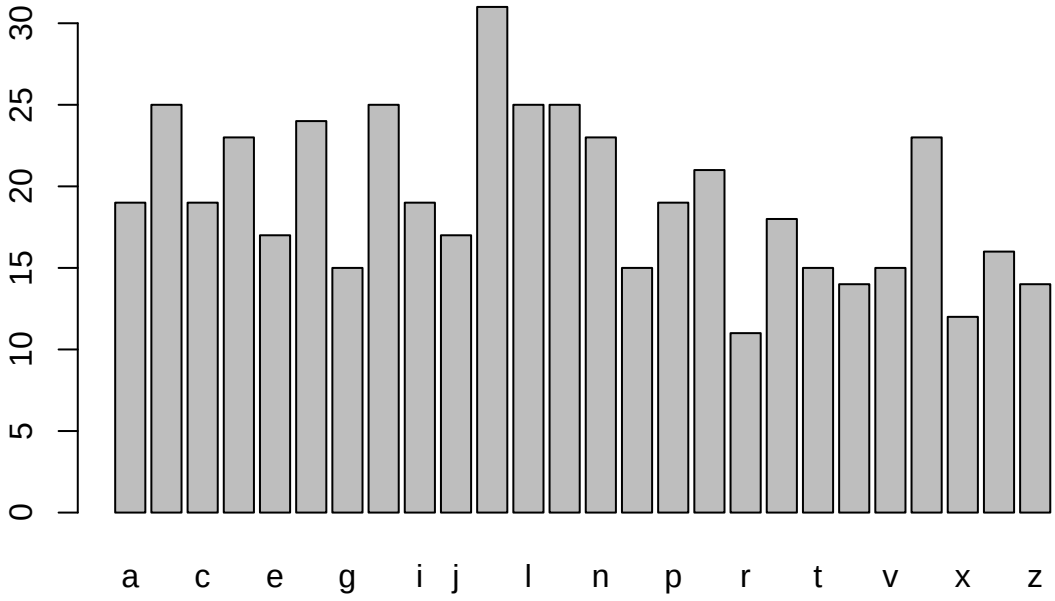

Figure 2: Letter frequency

```r
x <- make_lorem_ipsum(100)
x
```

```
## [1] "u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp al
```

and reuse it

```r
cat(paste(rep(x,10), collapse = "\n"))
```

```
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
## u ucktifxzkk gvfw unovpuqdn tumzsen xufrll cgxj oct wvhajuram mapbnmkjvm drwwuu vzfh njrcxglp abaucxl
```

use binford

R Core Team. 2016. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.