

R

Konstantin Ivanin

24 2017

```
library(stringr)
library(tidyverse)
library(tidyr)
library(readr)
```

-

```
      is.odd(),      TRUE,      , FALSE,      .

is.odd <- function(str) {
  return(nchar(str) %% 2 != 0)
}

is.odd(c("odd", "even", ""))

## [1] TRUE FALSE FALSE
```

```
      (1.1_sleep_hours.csv)      :      :

sleep.data <- read_csv('data/1.1_sleep_hours.csv')
sleep.data %>%
  separate(code, c('sex', 'year'), sep = '__') %>%
  ggplot(aes(sleep_hours, fill = sex)) +
  geom_density(alpha = 1/3) +
  ggtitle('      ') +
  xlab('      ') +
  ylab('      ')

## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x7f

## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x80

## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x80

## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x7f

## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xe1
```

```

## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x14
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xe9
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x8d
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x7f
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xdf
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xee
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xe7
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xfe
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x7f
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x7f
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x7f
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x80
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x7f
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xb7
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xd0
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xd2
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xd8
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xe1
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xd8
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xdc
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xde

```

```

## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xd7
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xe7
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0xfe
## Warning in grid.Call(L_stringMetric, as.graphicsAnnot(x$label)):
##      0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xdf
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xdf
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xb7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xd0
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xd2
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xdc
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0xde
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##      0x17

```

```

## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xb7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd0
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd2
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdc
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xde
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x87
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x14
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x8d
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x14

```

```

## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x8d
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdf
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdf
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdf
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xb7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd0
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd2
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdc

```

```

## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xde
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xb7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd0
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd2
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdc
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xde
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xb7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd0
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd2
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1

```

```

## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdc
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xde
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x14
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x8d
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x14
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x8d
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x14
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x8d
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x14

```

```

## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x8d
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x14
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x8d
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xe1
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0x14
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xe9
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0x8d
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdf
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xb9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdf
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xb5
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xdf

```



```

## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :                0x96
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :                0xe7
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :                0xfe
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :                0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xb7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xd0
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xd2
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xe1
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xdc
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xde
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xb9
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0x7f
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xb7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xd0
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xd2
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##                0xe1

```

```

## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xd8
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xdc
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xde
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xc7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xb4
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xe7
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0xfe
## Warning in grid.Call(L_textBounds, as.graphicsAnnot(x$label), x$x, x$y, :
##           0x7f
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xb7
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xd0
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xd2
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xd8
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xe1
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xd8
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xdc
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xde
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0x96
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xe7
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0xfe
## Warning in grid.Call.graphics(L_text, as.graphicsAnnot(x$label), x$x, x
## $y, :           0x7f

```

