

Visualization Homework

2023-03-02

```
acacia <- read.csv(file = "../data raw/ACACIA_DREPANOLOBIUM_SURVEY.txt",
  sep = "\t",
  na.strings = "dead")
is.numeric(acacia$HEIGHT)
```

```
## [1] TRUE
```

```
head(acacia)
```

```
##  SURVEY YEAR  SITE BLOCK TREATMENT  PLOT  ID HEIGHT AXIS1 AXIS2 CIRC
## 1      1 2012 SOUTH     1    TOTAL S1TOTAL 581   2.25  2.75  2.15  20
## 2      1 2012 SOUTH     1    TOTAL S1TOTAL 582   2.65  4.10  3.90  28
## 3      1 2012 SOUTH     1    TOTAL S1TOTAL 3111  1.50  1.70  0.85  17
## 4      1 2012 SOUTH     1    TOTAL S1TOTAL 3112  2.01  1.80  1.60  12
## 5      1 2012 SOUTH     1    TOTAL S1TOTAL 3113  1.75  1.84  1.42  13
## 6      1 2012 SOUTH     1    TOTAL S1TOTAL 3114  1.65  1.62  0.85  15
##  FLOWERS BUDS FRUITS ANT
## 1      0   0   10  CS
## 2      0   0  150  TP
## 3      2   1   50  TP
## 4      0   0   75  CS
## 5      0   0   20  CS
## 6      0   0    0   E
```

```
#View(acacia)
```

```
trees <- read_tsv("../data raw/TREE_SURVEYS.txt")
```

```
## Rows: 7508 Columns: 16
## -- Column specification -----
## Delimiter: "\t"
## chr (9): SITE, TREATMENT, PLOT, SPECIES, DEAD, HEIGHT, AXIS_2, MEASUREMENT, ...
## dbl (7): SURVEY, YEAR, BLOCK, ORIGINAL_TAG, NEW_TAG, AXIS_1, CIRC
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

```
tail(trees$HEIGHT,500)
```

```
## [1] "2.65" "1.91" "1.75" "2.73" "2.95" "1.89" "1.7" "2.89" "2.1" "1.79"
## [11] "1.75" "2.2" "2.6" "1.7" "1.55" "1.85" "2.6" "1.9" "1.6" "1.5"
```

```

## [21] "1.45" "1.5" "1.57" "2.78" "2.8" "0.8" "2.6" "2.6" "1.7" "1.7"
## [31] "1.78" "2.05" "2" "1.6" "1.6" "1.52" NA NA "2.17" "2.3"
## [41] "2.13" "2.3" "2.15" "1.45" "1.35" "1.3" "0.8" "0.9" "2.1" "2.4"
## [51] "2.1" "2.15" "2.13" "1.57" "1.85" "1.7" "2.05" "2.1" "2.57" "2.15"
## [61] "2.04" "1.9" "1.95" "3.1" "3.05" "3.57" "4" "4.75" "1.55" "1.7"
## [71] "1.7" "1.6" "2" "1.9" "1.92" "2.07" "1.82" "1.95" "3" "3.1"
## [81] "3.24" "3.1" "3.28" "3.38" "3.55" "3.63" "3.7" "3.39" "2.69" "2.7"
## [91] "3.05" "3" "3.6" "1.65" "1.85" "1.88" "2" "2.28" "3.55" "3.55"
## [101] "4.04" "3.7" "4.09" "2.31" "2.25" "2.57" "1.8" "3.17" "3.28" "3.3"
## [111] "3.92" "4" "4.37" "1.79" "1.8" "1.8" NA NA "2.68" "2.9"
## [121] "2.7" "2.8" "2.8" "2.79" "3.37" "3.29" "2.9" "3.13" "1.99" "2.09"
## [131] "2.26" "2.1" "2.23" "1.86" "2.1" "1.95" "1.8" "1.67" "2.13" "2.24"
## [141] "2.66" "2.6" "3.32" "1.75" "1.85" "2.05" "2.1" "2.47" "1.92" "2.15"
## [151] "2.12" "2" "1.72" "2.63" "2.79" "2.83" "2.7" "3" "2.17" "2.39"
## [161] "2.65" "3" "3.45" "1.75" "1.7" "1.5" "1.75" "1.6" "1.3" "1.85"
## [171] "1.95" "1.8" "1.6" "1.98" "1.8" "2.08" "2.2" "1.67" "1.99" "1.7"
## [181] "1.95" "2" "1.87" "1.63" "1.6" "1.45" "1.2" "1.06" "1.85" "1.85"
## [191] "1.85" "1.62" "1.68" "2.48" "1.75" "1.89" "2" "1.82" "1.29" "1.3"
## [201] "1.4" "0.7" "1.58" "1.5" "1.25" "1.4" NA NA "1.65" "1.6"
## [211] "1.52" "2.4" "1.35" "1.54" "1.2" "1.4" "1.75" NA "1.38" "1.1"
## [221] "1.9" "1.8" "1.85" "2.44" "1.6" "1.6" "1.6" "1.7" "1.76" "1.45"
## [231] "2.45" "1.6" "1.78" "1.25" "0.76" "1.6" "1.8" "2.2" "1.4" "1.3"
## [241] NA "1.5" "1.82" "1.93" "1.9" "1.93" "1.8" "2.25" "2.21" "2.3"
## [251] "2.21" "2.4" "2.23" "1.85" "1.5" "1.9" "1.9" "2.33" "1.65" "1.55"
## [261] NA "2" "2.05" "2.7" "2.65" "3" "2.78" "3.05" "2.4" "2.5"
## [271] "2.8" "2.95" "3.05" "3.57" "3.45" "4.1" "3.8" "3.82" "3.47" "3.55"
## [281] "4.2" "3.7" "4.09" "2.41" "2.25" "2.75" "3.7" "3.47" "2.83" "2.7"
## [291] "2.65" "2.8" "2.87" "1.7" "1.75" "1.9" "2" "2.82" "2.38" "2.32"
## [301] "2.65" "3.1" "2.64" "2.58" "2.62" "2.8" "2.75" "2.69" "2.37" "2.5"
## [311] "2.6" "2.5" "2.84" "2.9" "3.3" "3.85" "4.1" "4.17" "3.35" "3.4"
## [321] "3.5" "5.23" "3.15" "3.2" "2.5" "2.9" "3.6" "3.35" "2.2" "2.15"
## [331] "2.1" "2.7" "2.92" "3.52" "3.85" "4" "3.8" "4.01" "2.9" "3"
## [341] "3.65" "3.5" "4.28" "3.92" "3.5" "4.2" "4.15" "5.1" "2.91" "3.3"
## [351] "4.1" "4.8" "4.49" "3.45" "3.7" "3.7" "3.25" "3.56" "2" "2.01"
## [361] "2.2" "2.35" "2.84" "2.1" "2.1" "2.95" "3.51" "3.68" "1.58" "1.62"
## [371] "1.6" "1.62" "1.76" "1.7" "1.75" "2.1" "2.62" "2.71" "2.02" "2.55"
## [381] "2.5" "2.65" "2.61" "1.7" "1.94" "2.35" "2.27" "2.26" "1.3" "2.15"
## [391] "1.95" "1.7" "1.9" "2" "2.4" "1.75" "2.5" "2.1" "1.8" "1.2"
## [401] "2.25" "2.39" "3.18" "1.4" "1.85" "1.4" NA NA "1.9" "1.9"
## [411] "2.2" "2.6" "2.77" "1.5" "1.45" "1.45" "1.62" "1.75" "1.75" "1.85"
## [421] "2" "2.15" "2.2" "1.76" "1.85" "2" "2.05" "2.06" "1.45" "1.4"
## [431] "1.45" "1.7" "1.78" "1.8" "1.95" "1.9" "1.8" "1.96" "1.99" "2.11"
## [441] "2" NA NA "2.82" "3.1" "3" "3.1" "2.86" "1.6" "1.6"
## [451] "1.6" "1.72" "1.93" "1.6" "1.6" "1.6" "1.7" "2.1" "1.81" "1.92"
## [461] "1.85" "2.15" "2.33" "3.23" "3.74" "3.81" "4" "3.91" "2.9" "3.15"
## [471] "3.85" "3.35" "3.88" "1.89" "2.49" "2.65" "2.56" "3.06" "2.65" "2.45"
## [481] "3.65" "3.35" "4.3" "3" "2.12" "2.98" NA NA "2.54" "1.88"
## [491] "2.3" "2" "3.5" "3.15" "2" "3.4" "2.6" "2.69" NA "4.36"

```

```
str(trees)
```

```

## spc_tbl_ [7,508 x 16] (S3: spec_tbl_df/tbl_df/tbl/data.frame)
## $ SURVEY      : num [1:7508] 1 2 3 4 5 1 2 3 4 5 ...
## $ YEAR        : num [1:7508] 2009 2010 2011 2012 2013 ...

```

```
## $ SITE      : chr [1:7508] "SOUTH" "SOUTH" "SOUTH" "SOUTH" ...
## $ TREATMENT : chr [1:7508] "TOTAL" "TOTAL" "TOTAL" "TOTAL" ...
## $ BLOCK     : num [1:7508] 2 2 2 2 2 2 2 2 2 ...
## $ PLOT      : chr [1:7508] "S2TOTAL" "S2TOTAL" "S2TOTAL" "S2TOTAL" ...
## $ SPECIES   : chr [1:7508] "Acacia_etbaica" "Acacia_etbaica" "Acacia_etbaica" "Acacia_etbaica" ..
## $ ORIGINAL_TAG: num [1:7508] 1 1 1 1 1 2 2 2 2 2 ...
## $ NEW_TAG    : num [1:7508] NA NA NA NA NA NA NA NA NA NA ...
## $ DEAD      : chr [1:7508] "N" "N" "N" "N" ...
## $ HEIGHT    : chr [1:7508] "3.4" "3.32" "3.65" "3.74" ...
## $ AXIS_1    : num [1:7508] 6.1 8.25 8.85 5.5 5 2.2 2.75 3.3 NA 3.7 ...
## $ AXIS_2    : chr [1:7508] "5" "8.45" "9" "7.1" ...
## $ CIRC      : num [1:7508] 37.8 18.8 57 60 55 14.2 18.4 25 NA 31 ...
## $ MEASUREMENT : chr [1:7508] "D" "D" "C" "C" ...
## $ STEMS     : chr [1:7508] "1" "1" "1" "1" ...
## - attr(*, "spec")=
## .. cols(
## .. SURVEY = col_double(),
## .. YEAR = col_double(),
## .. SITE = col_character(),
## .. TREATMENT = col_character(),
## .. BLOCK = col_double(),
## .. PLOT = col_character(),
## .. SPECIES = col_character(),
## .. ORIGINAL_TAG = col_double(),
## .. NEW_TAG = col_double(),
## .. DEAD = col_character(),
## .. HEIGHT = col_character(),
## .. AXIS_1 = col_double(),
## .. AXIS_2 = col_character(),
## .. CIRC = col_double(),
## .. MEASUREMENT = col_character(),
## .. STEMS = col_character()
## .. )
## - attr(*, "problems")=<externalptr>
```

```
trees$HEIGHT
```

```
## [1] "3.4" "3.32" "3.65" "3.74" "3.59" "2.3" "2.32"
## [8] "2.75" NA "2.86" "1.8" "2.95" "3" NA
## [15] "3.43" "2.1" "2.25" "2.6" "2.7" "2.89" "3.35"
## [22] "3.1" "3.25" "3.75" "3.42" "2.7" "2.6" "3.02"
## [29] "3.35" "3.86" "3.45" "3.35" "3.45" "3.81" "3.3"
## [36] "1.2" "1.1" "1.6" "1.91" "2.05" "1.3" "1.72"
## [43] "2.12" "2.36" "2.73" "2.2" "2.6" "2.87" "3.31"
## [50] "3.44" "2.4" "2.4" "2.68" "3.15" "3.17" "1.3"
## [57] "1.4" "1.2" NA "2.08" "2" "2.15" "2.2"
## [64] "2.1" "2.18" "1.95" "2.1" "2.3" "2.32" "2.45"
## [71] "2.6" "2.87" "2.9" "3.47" "3.49" "1.4" "1.7"
## [78] "1.84" "2.2" "2.51" "1.55" "1.7" "1.9" "2.1"
## [85] "2.1" "2.9" "2.95" "3.24" "3.75" "4.01" "4.6"
## [92] "4.95" "5.1" "4.3" "4.4" "2.3" "2.5" "2.78"
## [99] "3" "3.2" "2.4" "2.64" "3.3" "3.9" "3.75"
## [106] "1.4" "1.69" "2.34" "2.7" "2.79" "1.1" "1.74"
## [113] "2" "2.1" "1.94" "2.1" "2.25" "2.75" "2.9"
```

##	[120]	"2.98"	"1.4"	"1.35"	"1.8"	"1.65"	NA	"1.15"
##	[127]	"0.9"	"1.35"	"1.8"	"2.42"	"1.9"	"2.29"	"2.9"
##	[134]	"3.4"	"3.51"	"2.85"	"3.42"	NA	"6.41"	"2.6"
##	[141]	"2.8"	"4"	"4.24"	"2.45"	"2.85"	"3.65"	"4.45"
##	[148]	"2.2"	"2.4"	"2.3"	"2.4"	"2.58"	"1.9"	"1.95"
##	[155]	"2.19"	"3.13"	"0.65"	"0.6"	"0.71"	"1.2"	"1.67"
##	[162]	"2.17"	"2.35"	"2.45"	"2.25"	"2.05"	"0.5"	NA
##	[169]	NA	"2.4"	"2.45"	"2.9"	"3.15"	"3.1"	"4"
##	[176]	"4"	"3"	"4.85"	"5.78"	"2.55"	"3.9"	"4.55"
##	[183]	"4"	"4.55"	"3.7"	"3.8"	"3.75"	"3.88"	"1.5"
##	[190]	"1.6"	"1.9"	"2.15"	"2.23"	"1"	"0.93"	"1.15"
##	[197]	"1.65"	"2.37"	"0.23"	"0.3"	"0.35"	"0.3"	"0.6"
##	[204]	"0.58"	"0.6"	"0.6"	"0.6"	"2.62"	"2.9"	"3.12"
##	[211]	"3.3"	"3.25"	"1.1"	"1.2"	"1.45"	"1.45"	"2.47"
##	[218]	"2.25"	"2.55"	"2.78"	"3.15"	"3.27"	"1.58"	"1.7"
##	[225]	"2.2"	"2.2"	"2.38"	"2.45"	"2.8"	"3.01"	"3"
##	[232]	"3.15"	"1.75"	"1.75"	"1.9"	"1.9"	"1.97"	"2"
##	[239]	"2.1"	"1.9"	"1.75"	"1.76"	"1.7"	"1.8"	"1.8"
##	[246]	"1.8"	"1.91"	"2.6"	"2.4"	"2.8"	"2.7"	"2.08"
##	[253]	"1.9"	"1.88"	"1.9"	"2.02"	"2.65"	"1.4"	"1.6"
##	[260]	"1.85"	"1.75"	"1.8"	"0.8"	"0.85"	"1.15"	"1.38"
##	[267]	"1.7"	"1.85"	"1.9"	"2"	"1.9"	"2.36"	"1.5"
##	[274]	"1.65"	"1.89"	"1.85"	"1.83"	"1.5"	"1.7"	"1.9"
##	[281]	"1.65"	"1.71"	"2.19"	"2.4"	"2.35"	"2.15"	"2.2"
##	[288]	"3.4"	"3.55"	"3.36"	"3.2"	"3"	"1.8"	"2"
##	[295]	"2.2"	"2.4"	"2.25"	"2"	"2.25"	"2.45"	"2.6"
##	[302]	"2.93"	"1.55"	"1.85"	"2.25"	"2.2"	"2.45"	"2.1"
##	[309]	"2.2"	"2.3"	"2.49"	"2.66"	"0.9"	"2.4"	"2.38"
##	[316]	"2.91"	"3.41"	"2"	"1.1"	"0.92"	"1.7"	"1.96"
##	[323]	"2.25"	"2.42"	"2.55"	"2.5"	"2.44"	"1.65"	"1.55"
##	[330]	"2.05"	"2.43"	"2.43"	"3.3"	"3.8"	"3.69"	"4"
##	[337]	"7.25"	"1.62"	"1.5"	"2"	"2.5"	"2.7"	"2.7"
##	[344]	"3.3"	"3.6"	"3.6"	"4"	"2.9"	"3"	"3.25"
##	[351]	"4"	"3.95"	"1.35"	"1.5"	"1.75"	"1.85"	"2.13"
##	[358]	"3.3"	"3.3"	"3.14"	"3.65"	"3.81"	"0.9"	NA
##	[365]	"0.95"	"0.74"	"0.7"	"10"	"6"	"7.2"	"7.6"
##	[372]	"4.7"	"2.44"	"2.8"	"3.2"	"4.1"	"4.49"	"2.3"
##	[379]	"2.63"	"2.71"	"3.34"	"0.79"	"1"	"0.6"	"0.5"
##	[386]	"0.6"	"2.27"	"2.5"	"3.31"	"3.2"	"3.82"	"1.45"
##	[393]	"1.4"	"1.5"	"1.15"	"1.44"	"1.13"	"1.2"	"0.61"
##	[400]	"0.73"	"0.65"	"0.53"	"0.6"	"0.47"	"0.55"	"2.55"
##	[407]	"2.4"	"2.53"	"2.5"	"2.13"	"1.8"	"2.05"	"2.25"
##	[414]	"2.75"	"2.1"	"2.05"	"2.35"	"2.63"	"2.25"	"1.14"
##	[421]	"2.6"	"2.55"	"2.79"	"2.8"	"3.8"	"2.52"	"2.8"
##	[428]	"2.7"	"2.8"	"3.4"	"1"	"1.1"	"1.35"	"1.3"
##	[435]	"1.22"	"1.75"	"1.8"	"1.85"	"1.55"	NA	"1.1"
##	[442]	"1"	"1.2"	"1.3"	"1.25"	"1.35"	"1.5"	"1.24"
##	[449]	NA	"1.4"	"1.45"	"1.55"	"1.5"	"1.62"	"1.6"
##	[456]	"1.7"	"1.75"	"1.65"	"1.75"	"2.16"	"2.3"	"2.16"
##	[463]	"2.17"	"2.43"	"1.3"	"1.28"	"1.45"	"1.28"	"1.25"
##	[470]	"1"	"1.1"	"1.4"	"1.07"	"1.1"	"0.75"	"0.63"
##	[477]	"0.82"	"0.67"	"0.7"	"0.5"	"0.45"	"0.62"	"0.68"
##	[484]	"0.9"	"2.15"	"2.15"	"2.25"	NA	NA	"3.74"
##	[491]	"3.75"	"4.35"	"4.1"	"5.9"	"2.45"	"2.37"	"2.75"

##	[498]	"0.3"	NA	"2.7"	"3"	"3.25"	"2.9"	"4"
##	[505]	"2.59"	"2.8"	"3.2"	"2.95"	"3.8"	"2.75"	"3.15"
##	[512]	"3.3"	"2.95"	"3.66"	"2.72"	"2.65"	NA	NA
##	[519]	NA	"2.64"	"2.84"	"3.1"	"3.15"	"3.45"	"3.94"
##	[526]	"4"	"4"	"4.1"	"4.1"	"3.06"	"3.05"	"3.65"
##	[533]	"3.57"	"3.6"	"1.95"	"2.05"	"2.55"	"2.3"	"2.87"
##	[540]	"1"	"1.5"	"1.85"	"2.75"	"2.72"	"2.52"	"2.35"
##	[547]	"2.5"	"2.4"	"2.92"	"2.2"	"2.8"	"2.65"	"2.9"
##	[554]	"2.8"	"2.1"	"2.1"	"2.5"	"2.35"	"2.7"	"2.05"
##	[561]	"2"	"2.25"	"1.4"	"1.9"	"1.6"	"2"	"2.2"
##	[568]	"2.1"	"2.4"	"2.74"	"2.79"	"2.95"	"3"	"3.38"
##	[575]	"1.62"	NA	"3.59"	"3.2"	"2.8"	NA	NA
##	[582]	"2.1"	"2"	"2.07"	"2.15"	"1.64"	"2.09"	"2"
##	[589]	"2.2"	"1.9"	"1.85"	"2.85"	"2.45"	"2.95"	"2.8"
##	[596]	"2.61"	"3.31"	"2.5"	"2.4"	"1.8"	"1.71"	"2.08"
##	[603]	NA	NA	NA	NA	"2.75"	"2.3"	"2.5"
##	[610]	"2.95"	"3.63"	"1.25"	"0.78"	"1.5"	"2.05"	"2.38"
##	[617]	"1.7"	"2.3"	"2.5"	"2.28"	"1.7"	"1.68"	"1.3"
##	[624]	"1.6"	"1.47"	"1.72"	"1.65"	"1.5"	"1.4"	"1.25"
##	[631]	"1.3"	"1.72"	"1.55"	"2.3"	"2.02"	"1.9"	"2.76"
##	[638]	"3.17"	"2.95"	"2.65"	"3.18"	"1.25"	"1.25"	"1.5"
##	[645]	"1.35"	"1.55"	"1.75"	"1.2"	"1.5"	"1.8"	"1.82"
##	[652]	"1.76"	NA	NA	NA	NA	"1.8"	"1.75"
##	[659]	"1.9"	"1.8"	"1.8"	"1.3"	NA	"1.75"	"2.88"
##	[666]	NA	"2.07"	"2.05"	"2.2"	"1.3"	NA	"1.45"
##	[673]	"2.25"	"1.6"	"1.3"	"1.46"	"2.58"	"2.65"	"2.7"
##	[680]	"2.4"	"2.44"	"2.58"	"2.1"	NA	NA	NA
##	[687]	"2.9"	"2.95"	"3.05"	"3.05"	"3.34"	"2.69"	"2.55"
##	[694]	"2.65"	"2.6"	"2.99"	"2.75"	"3.05"	"2.87"	"2.87"
##	[701]	"3.38"	"1.9"	"2.7"	"2.05"	"1.85"	"1.95"	"2.55"
##	[708]	"2.55"	"2.76"	"2.3"	"2.45"	"1.89"	"2.04"	"2.02"
##	[715]	NA	NA	"1.9"	"2.1"	"2.24"	"2.5"	"2.42"
##	[722]	"2.34"	"2.32"	"2.6"	"2.35"	"2.69"	"1.3"	"1.35"
##	[729]	"1.6"	"1.5"	"1.85"	"2.93"	"3"	"3.72"	"4.2"
##	[736]	"4.56"	"1.94"	"1.9"	"2.4"	"2.35"	"2.85"	"2.05"
##	[743]	"2.75"	"2.9"	"3.2"	"3.24"	"2.1"	"1.75"	"2.5"
##	[750]	"4.5"	"2.49"	"2.45"	"2.45"	"2.8"	"3"	"3.8"
##	[757]	"1.4"	"1.8"	"1.75"	"2.15"	"2.34"	"1.5"	"1.75"
##	[764]	"2.1"	"2"	"2.3"	"3.5"	"3.9"	"3.92"	"3.9"
##	[771]	"3.88"	"1.2"	"1.2"	"1.6"	"2.2"	"2.4"	"1.3"
##	[778]	"1.45"	"1.8"	"2.15"	"2.09"	"2.9"	"2.9"	"3.15"
##	[785]	"3.5"	NA	"2"	"2.5"	"2.9"	"2.83"	"2.74"
##	[792]	"1.4"	"1.65"	"2.75"	"4.5"	"3.2"	"2.7"	"2.85"
##	[799]	"3.05"	"3"	"2.35"	"1.3"	"1.4"	"1.91"	"2.2"
##	[806]	"1.66"	"1.9"	"2.1"	"2.31"	"2.25"	"2.77"	"2.35"
##	[813]	"2.4"	"2.11"	"3.15"	"3.36"	"3.44"	"2.4"	"2.48"
##	[820]	"2.4"	"2.5"	"2.25"	"2.67"	"4"	"3.9"	"4.2"
##	[827]	"3.37"	"3.59"	"4.5"	"4"	"3.55"	"2.64"	"2.65"
##	[834]	"3.55"	"2.84"	"3.05"	"1.1"	"1.3"	"1.6"	"1.64"
##	[841]	"2.08"	"2.8"	"3.03"	"2.64"	"2.4"	"2.7"	"2.6"
##	[848]	"2.79"	"2.96"	"2.8"	"2.95"	"2.4"	"2.15"	"2.04"
##	[855]	"2.22"	"2.15"	"3.25"	"3.1"	"3.24"	"2.9"	"3.14"
##	[862]	"1.97"	"2.95"	"2.1"	"2.05"	"2"	"2.41"	"2.51"
##	[869]	"2.73"	"2.6"	"2.98"	"3.45"	"3.27"	"3.33"	"2.2"

##	[876]	"3.15"	"1.8"	"1.7"	"2.13"	"2.78"	"2.59"	"1.9"
##	[883]	"1.7"	"1.91"	"2.55"	"2.24"	"4.51"	"5.4"	"5.9"
##	[890]	"6.83"	"2.77"	NA	NA	"2.42"	"2.5"	"2.49"
##	[897]	"2.88"	"2.95"	"2.05"	"2.28"	"2.17"	"1.75"	"2.15"
##	[904]	"1.18"	"1.45"	"1.2"	"1.64"	"1.8"	NA	"2.55"
##	[911]	"2.7"	"3.05"	"3.35"	"3.59"	"2.42"	"2.73"	"2.85"
##	[918]	"3.15"	"2.9"	"3.25"	"3.31"	"3.55"	"3.82"	"4.23"
##	[925]	"2.7"	"2.85"	"3.3"	"3.5"	"3.72"	"1.45"	"1.55"
##	[932]	"2.45"	"2.9"	"4.79"	"3.15"	"3.35"	"3.95"	"4.5"
##	[939]	"4.3"	"3.14"	"3.05"	"3.6"	"3.3"	"3.95"	"2.8"
##	[946]	"2.9"	"2.95"	"3.4"	"2.98"	"2.52"	"2.25"	"2.8"
##	[953]	"3"	"3.15"	"1.85"	"1.9"	"1.9"	"2"	"2.1"
##	[960]	"2.65"	"3.19"	"3.1"	"3.6"	"3.9"	"3.9"	"4.02"
##	[967]	"4.27"	"5"	"4.63"	"1.2"	"1.65"	"1.9"	"2.2"
##	[974]	"2.5"	"5.2"	"5.85"	"5.75"	"7"	"6.27"	"3.3"
##	[981]	"4.3"	"3.6"	"4.5"	"4.7"	"5.9"	"6.57"	"6.42"
##	[988]	"6.3"	"6.6"	"1.85"	"2.2"	"2.45"	"2.8"	"3.21"
##	[995]	"1.1"	"1.45"	"1.7"	"1.7"	"1.9"	"2.45"	"2.95"
##	[1002]	"3.05"	"2.8"	"3.85"	"1.02"	"1.6"	"4"	"2.6"
##	[1009]	"2.78"	"4"	"4"	"4.45"	"4.2"	"5.23"	"1.8"
##	[1016]	"1.8"	"2.8"	"2.2"	"2.44"	"1.5"	"2.65"	"3.4"
##	[1023]	"4.7"	"4"	"1.5"	"2.3"	"4"	"3.6"	"4.29"
##	[1030]	"1.5"	"1.23"	"2.1"	"2.6"	"2.71"	"2.6"	"2.6"
##	[1037]	"2.6"	"3"	"3.2"	"2.45"	"2.55"	"2.8"	"2.4"
##	[1044]	"2.8"	"2.9"	"2.4"	"2.75"	"3.1"	"2.89"	"2.72"
##	[1051]	NA	"2.25"	"2.5"	"2.6"	"1"	"1.1"	"1.4"
##	[1058]	"1.3"	"1.1"	"6.35"	"6.74"	"6.1"	"6.7"	"6.1"
##	[1065]	"3.2"	"3.35"	"4.6"	"4.2"	"5.19"	"1.72"	"2.05"
##	[1072]	"2.3"	"2.3"	"2.47"	"1.05"	"1.12"	"1.2"	"1.4"
##	[1079]	"1.64"	"1.41"	"1.55"	"1.85"	"2.25"	"2.49"	"2.63"
##	[1086]	"2.5"	"2.75"	"2.65"	"2.74"	"1.35"	"1.6"	"1.8"
##	[1093]	"2"	"2.15"	"2.55"	"1.83"	"2.8"	"2.5"	"2.6"
##	[1100]	"2"	"2.3"	"2.15"	"2.5"	"2.65"	"2.65"	"2"
##	[1107]	"3.15"	"3.2"	"3.35"	"1.5"	"1.75"	"1.8"	"1.85"
##	[1114]	"1.95"	"2.05"	"1.65"	"2.3"	"2.7"	"2.6"	"2.2"
##	[1121]	"1.6"	"2.4"	"2.4"	"2.45"	"2.6"	"1.87"	"2.85"
##	[1128]	"2.9"	"3"	"1.85"	"1.95"	"2.3"	"2.9"	"3.82"
##	[1135]	"1.4"	"1.7"	"1.8"	"1.85"	"2.05"	"2.7"	"2.5"
##	[1142]	"3"	"2.95"	"3.44"	"1.4"	"2.22"	"3.1"	"3.25"
##	[1149]	"3.55"	"1.85"	"3.25"	"2.04"	"2.3"	"2.9"	"2.32"
##	[1156]	"2.69"	"3.7"	"3.8"	"3.9"	"2.52"	"1.8"	"3.65"
##	[1163]	"3.85"	"4.5"	"2"	"2.1"	"2.65"	"2.6"	"2.66"
##	[1170]	"1.9"	"1.55"	"2.1"	"2.7"	"2.6"	"2.5"	"2.35"
##	[1177]	"2.57"	NA	"2.73"	"1.4"	"1.5"	"1.8"	"1.9"
##	[1184]	"2.23"	"1.9"	"2.1"	"2.6"	"2.6"	"2.77"	"2.5"
##	[1191]	"2.4"	"3.4"	"3.85"	"3.2"	"2.92"	"1.95"	"4"
##	[1198]	"3.55"	"3.85"	"2.24"	"1.73"	"3.1"	"3.7"	"3.73"
##	[1205]	"2"	"1.69"	"2.35"	"2.2"	"2.37"	"3.35"	"3.6"
##	[1212]	"3.8"	"2.6"	"2.57"	"1.4"	"1.7"	"2.45"	"2.95"
##	[1219]	"2.85"	"1.4"	"1.7"	"2.15"	"2.5"	"2.64"	"2.4"
##	[1226]	"2.2"	"3.1"	"2.7"	"3.3"	"2.6"	"2.9"	"4.25"
##	[1233]	"4.8"	"4.5"	"1.8"	"2"	"2.9"	"3.3"	"3.55"
##	[1240]	"2.1"	"2.85"	"3.5"	"3.65"	"3.63"	"2.1"	"3.9"
##	[1247]	"2.7"	"2.95"	"4.6"	"1.2"	"0.85"	"1.1"	"1"

## [1254]	"0.9"	"3.95"	"3.92"	"4.3"	"4.3"	"4.61"	"2.34"
## [1261]	"3.05"	"3.5"	"3.8"	"4.05"	"2.91"	"1.75"	"2.9"
## [1268]	"3.1"	"2.9"	"2"	"2.6"	"2.4"	"2.45"	"2.4"
## [1275]	"4.3"	"4.25"	"4.25"	"4.3"	"4.38"	"3.9"	"3.65"
## [1282]	"5.1"	"4.1"	"3.95"	"2.49"	"2.55"	"3.4"	"3"
## [1289]	"3.85"	"2.5"	"2.45"	"2.8"	"2.9"	"2.97"	"2.15"
## [1296]	"1.95"	"1.85"	"2.2"	"2.29"	"2"	"2.08"	"2.15"
## [1303]	"2.54"	"2.55"	"2.35"	"2.2"	"2.57"	"1.8"	"2.98"
## [1310]	"2.75"	"2.8"	"2.95"	"2.85"	"3.27"	"2.4"	"2.42"
## [1317]	"2.4"	"3.1"	"3.1"	"2.6"	"1.95"	NA	NA
## [1324]	NA	"1.55"	"1.5"	"0.85"	"3.9"	"4.1"	"2.45"
## [1331]	"2.2"	"2.3"	"1.6"	"2.65"	"1.85"	"9.9"	"2.45"
## [1338]	"3"	"3.18"	"2.19"	"1.5"	"1.9"	"2.2"	"2.32"
## [1345]	"3.35"	"3.5"	"2.45"	"1.8"	"1.5"	"1.4"	"1.51"
## [1352]	"1.9"	"1.75"	"2.14"	"1.33"	"1.16"	"1.5"	"1.6"
## [1359]	"1.45"	"1.4"	"1.15"	"0.9"	NA	"0.84"	"1.2"
## [1366]	"1.75"	"1.5"	"1.9"	"2.23"	"1.35"	"0.81"	"1.4"
## [1373]	"1.7"	"1.91"	"1.3"	"1.1"	"1.5"	"1.6"	"1.75"
## [1380]	"1.3"	"0.96"	"1"	"1.2"	"1.47"	"1.8"	"1.48"
## [1387]	"1.85"	"1.55"	"1.7"	"1.45"	"1.5"	"1.6"	"2.5"
## [1394]	"1.35"	"1.92"	"1.85"	"1.9"	"1.85"	"1.82"	"2.15"
## [1401]	"2.2"	"3"	"2.7"	"2.45"	"2.3"	"1.75"	"2"
## [1408]	"1.75"	"1.75"	"1.55"	"2.15"	"1.8"	"1.7"	"1.12"
## [1415]	"2.45"	"2.7"	"2.5"	"2.5"	"2.42"	"1.4"	"1.4"
## [1422]	"1.4"	"1.45"	"1.3"	"3.1"	"3.15"	"2.95"	"2.9"
## [1429]	"3.05"	"2.05"	"2.25"	"3.75"	"2.2"	"2.57"	"2.25"
## [1436]	"2.1"	"1.9"	"2.7"	"2.2"	"1.2"	"1.25"	"1.7"
## [1443]	"1.9"	"2.25"	"2.11"	"2.05"	"2.55"	"2.2"	"2.58"
## [1450]	"1.6"	"1.8"	"1.95"	"2"	"1.95"	"2.29"	"2.45"
## [1457]	"0.8"	"1.7"	"1.85"	"2.6"	"2.55"	"2.6"	"2.6"
## [1464]	"2.35"	"1.68"	"1.52"	"1.2"	"2.2"	"1.35"	"2.16"
## [1471]	"1.95"	"1.8"	"1.8"	"1.85"	"0.98"	"1.15"	"1.7"
## [1478]	"1.5"	"1.55"	"2.66"	"2.8"	"2.9"	"2.5"	"2.8"
## [1485]	"1.08"	"1.15"	"1.3"	"1.6"	"1.64"	"1.44"	NA
## [1492]	"0.5"	NA	"0.73"	"2.8"	"3.75"	"3.35"	"3.5"
## [1499]	"3.45"	"2.82"	"2.75"	"3.25"	"3.45"	"3.68"	"2.7"
## [1506]	"2.75"	"3.2"	"3.14"	"3.6"	"1.9"	"1.7"	"2.3"
## [1513]	"2.85"	"2.71"	"2.64"	"2.75"	"3.15"	"3.2"	"3.61"
## [1520]	"2.35"	"2.4"	"2.55"	"2.9"	"3.24"	"2.34"	"3"
## [1527]	"3.44"	"3.35"	"3.63"	"2.25"	"2.45"	"2.65"	"2.9"
## [1534]	"2.92"	"2.05"	"1.75"	"2.05"	"2.35"	"2.78"	"2.1"
## [1541]	"2.05"	"2.6"	"2.65"	"2.76"	"1.8"	"2"	"2.3"
## [1548]	"2.5"	"2.61"	"3.3"	"3.67"	"4.2"	"4.2"	"5.08"
## [1555]	"1.95"	"2.05"	"2.35"	"2.64"	"3.15"	"2.5"	"3.4"
## [1562]	"3.3"	"3.7"	"4.73"	"1.25"	"1.65"	"1.95"	"2.74"
## [1569]	"2.26"	"2.2"	"2.8"	"2.6"	"2.95"	"3.18"	"2.22"
## [1576]	"2.2"	"2.8"	"3"	"3.1"	"2.8"	"2.8"	"3.25"
## [1583]	"3.3"	"3.75"	"1.8"	"2"	"2.7"	"2.85"	"3.05"
## [1590]	"2.4"	"2.29"	"3.2"	"3.35"	"3.69"	"2.42"	"2.4"
## [1597]	"2.65"	"3.5"	"2.89"	"2.75"	"2.8"	"3"	"2.7"
## [1604]	"4.09"	"2.8"	"2.85"	"2.8"	"2.4"	"2.63"	"2.35"
## [1611]	"2.45"	"2.95"	"2.8"	"3.14"	"3.25"	"3.82"	"3.97"
## [1618]	"3.8"	"4.22"	"1.4"	"1.2"	"2.15"	"2.44"	"2.73"
## [1625]	"2.95"	"2.95"	"3.2"	"3.6"	"4.14"	"1.2"	"1.2"

##	[1632]	"1.85"	"1.9"	"1.5"	"2.05"	"2.05"	"2.2"	"2.1"
##	[1639]	"2.13"	"1.8"	"1.9"	"2.74"	"3.1"	"2.82"	"0.81"
##	[1646]	"1.2"	"1.6"	"1.74"	"1.95"	"2.5"	"1.85"	"3.1"
##	[1653]	"3.1"	"3.08"	"1.58"	"1.6"	"2"	"2.05"	"2.22"
##	[1660]	"1.35"	"1.45"	"1.87"	"2.2"	"2.34"	"1.49"	"2.3"
##	[1667]	"1.8"	"1.95"	"2.2"	"2.45"	"1.95"	"2.65"	"2.5"
##	[1674]	"2.56"	"2.1"	"1.9"	"2.5"	"2.6"	"2.75"	"1.9"
##	[1681]	"2.4"	"2.7"	"2.7"	"3.09"	"1.95"	"2.31"	"3.05"
##	[1688]	"3.05"	"2.95"	"4.09"	"4.35"	"5.14"	"4.95"	"4.39"
##	[1695]	"3.14"	"3.25"	"3.6"	"2.9"	"2.59"	"1.41"	"1.7"
##	[1702]	"2.8"	"3.3"	"3.66"	"2.08"	"2"	"2.2"	"2.05"
##	[1709]	"1.97"	"1.17"	"1.9"	"2.05"	"3.35"	"3.11"	"2.33"
##	[1716]	"2.4"	"2.05"	"2.65"	"3.23"	"3.2"	"3.15"	"3.8"
##	[1723]	"3.5"	"3.25"	"0.88"	"0.81"	"1"	"3.6"	"1.1"
##	[1730]	"1.51"	"1.3"	"1.8"	"1.87"	"2.05"	"2.25"	"2.35"
##	[1737]	"2.6"	"2.38"	"2.65"	"1.37"	"1.1"	"2.35"	"2.58"
##	[1744]	"2.35"	"2.03"	"2.7"	"2.2"	"2.65"	"2.5"	"1.47"
##	[1751]	"1.5"	NA	NA	NA	"2.94"	"2"	"2.3"
##	[1758]	"2.35"	"2.35"	"1.95"	"2.05"	"1.95"	"1.88"	"2.21"
##	[1765]	"2.45"	"2.3"	"2.6"	"3.1"	"3.63"	"3.8"	"2.65"
##	[1772]	"4.1"	"4.35"	"4.72"	"2.8"	"2.9"	"2.9"	"2.3"
##	[1779]	"3.35"	"2.45"	"2.24"	"3.1"	"3.7"	"3.97"	"2.6"
##	[1786]	"2.45"	"2.8"	"3.6"	"3.32"	"2.7"	"2.7"	"3.1"
##	[1793]	"3.35"	"3.08"	"1.9"	"1.8"	"2.2"	"2.5"	"2.1"
##	[1800]	"2.35"	"2.4"	"2.9"	"2.97"	"3.1"	"2.5"	"2"
##	[1807]	"2.7"	"2.9"	"2.68"	"2.35"	"2.25"	"2.65"	"3"
##	[1814]	"2.7"	"1.4"	"1.45"	"1.9"	"2.2"	"2.58"	"1.5"
##	[1821]	"1.51"	"1.9"	"2"	"2.39"	"2.5"	"2.3"	"2.8"
##	[1828]	"3.5"	"3.34"	"1.8"	"1.8"	"2.2"	"3"	"3.09"
##	[1835]	"1.8"	"1.89"	"2.2"	"2.8"	"3.16"	"1.85"	"1.85"
##	[1842]	"2.05"	"3.3"	"2.8"	"1.35"	"1.45"	"1.7"	"2.1"
##	[1849]	"2.29"	"2.5"	"2.8"	"2.8"	"3.05"	"3"	"1.45"
##	[1856]	"1.51"	"2.35"	"1.75"	"2.58"	"1.3"	"1.5"	"1.75"
##	[1863]	"2.8"	"2.1"	"1.59"	"1.75"	"1.9"	"2"	"2.06"
##	[1870]	"2.22"	"2.45"	"2.9"	"3"	"3.04"	"2.05"	"2"
##	[1877]	"2.15"	"2.05"	"2.3"	"2.37"	"2.4"	"2.75"	"2.94"
##	[1884]	"3.31"	"2.65"	"2.77"	"2.75"	"3.2"	"missing"	"1.63"
##	[1891]	"1.5"	"1.85"	"1.8"	"1.8"	"3.24"	"3.28"	"3.9"
##	[1898]	"3.8"	"3.9"	"2.08"	"1.14"	"2.55"	"3.48"	"4.34"
##	[1905]	"1.36"	"1.45"	"2.45"	"2.4"	"2.05"	"2.4"	"2.45"
##	[1912]	"2.7"	"2.5"	"2.79"	"1.28"	"1.3"	"1.6"	"1.9"
##	[1919]	"1.69"	"2.17"	"2"	"2.2"	"2"	"2.12"	"1.05"
##	[1926]	"1.2"	"1.4"	"1.35"	"1.25"	"1.48"	"1.5"	"1.8"
##	[1933]	"1.9"	"2"	"1.82"	"1.9"	"2.35"	"1.8"	"1.85"
##	[1940]	"3.12"	"2.5"	"2.9"	"2.8"	"2.62"	"1.57"	"1.5"
##	[1947]	"1.7"	"2"	"1.97"	"1.18"	"1.2"	"1.8"	"1.9"
##	[1954]	"1.75"	"2.16"	"2.04"	"2.12"	"2.45"	"2.38"	"3.64"
##	[1961]	"2.24"	"3.75"	"3.7"	"3.6"	"1.69"	"1.8"	"2.05"
##	[1968]	"2.25"	"2.4"	"2.15"	"2.75"	"3"	"3.1"	"3.4"
##	[1975]	"2.64"	"2.8"	"2.75"	"3.15"	"3.05"	"2.68"	"2.35"
##	[1982]	"2.65"	"2.55"	"2.62"	"1.99"	"2.2"	"2.5"	"2.35"
##	[1989]	"2.7"	"2.15"	"2.6"	"2.85"	"2.8"	"3.21"	"4.15"
##	[1996]	"4.09"	"4.1"	"3.84"	"4.24"	"4.24"	"4.36"	"4.4"
##	[2003]	"3.92"	"4.52"	"1.55"	"2.87"	"2.65"	"2.9"	"3.32"

##	[2010]	"4.55"	"4.45"	"5.1"	"4.4"	"5.6"	"2.1"	"2.04"
##	[2017]	NA	NA	NA	"1.85"	"1.78"	"1.75"	"1.8"
##	[2024]	"1.72"	"1.85"	"1.7"	"2.1"	"2.47"	"2.55"	"1.94"
##	[2031]	"1.8"	"1.92"	"2.15"	"2.1"	"1.8"	"1.75"	"1.75"
##	[2038]	"1.9"	"1.95"	"1.62"	"1.7"	"1.9"	"1.7"	"1.77"
##	[2045]	"1.1"	"1.1"	"1.5"	"1.95"	"2.23"	"1.4"	"1.35"
##	[2052]	"1.65"	"1.8"	"2"	"1.14"	"0.8"	"1.3"	"1.4"
##	[2059]	"1.68"	"1.09"	"1.1"	"1.35"	"1"	"0.95"	"1.3"
##	[2066]	"1.35"	"1.8"	"1.75"	"2.12"	"2.45"	"2.7"	"2.7"
##	[2073]	"3.1"	"3.65"	"2.75"	"2.9"	"3.3"	"2.84"	"3.3"
##	[2080]	"1.35"	"1.5"	"1.84"	"2.12"	"2.33"	"2.55"	"2.45"
##	[2087]	"2.8"	"3"	"3.35"	"2.17"	"2.04"	"2.9"	"2.6"
##	[2094]	"3.15"	"2.35"	"3.32"	"2.7"	"3.05"	"3.28"	"2.3"
##	[2101]	"2"	"2.5"	"2.4"	"2.65"	"2.15"	"2.05"	"2.3"
##	[2108]	"1.95"	"2.26"	"2.45"	"2.54"	"2.8"	"2.35"	"2.52"
##	[2115]	"2.4"	"2.61"	"2.9"	"3.1"	"3.39"	"2"	"2.08"
##	[2122]	"2.4"	"2.35"	"2.36"	"2.9"	"3.15"	"3.3"	"2.4"
##	[2129]	"3.35"	"1.8"	"1.8"	"2.35"	"2.4"	"2.63"	"2.6"
##	[2136]	"2.7"	"2.9"	"2.65"	"2.95"	"2.5"	"2.91"	"3.1"
##	[2143]	"2.86"	"3.38"	"1.2"	"1.2"	"1.3"	"1.45"	"1.66"
##	[2150]	"2.2"	"2.3"	"2.25"	NA	NA	"1.4"	"1.5"
##	[2157]	"1.8"	"1.83"	"1.84"	"2.7"	"2.7"	"3.25"	"2.8"
##	[2164]	"3.47"	"2.15"	"2.18"	"2.75"	"2.8"	"2.89"	"2.3"
##	[2171]	"2.47"	"2.9"	"3.55"	"3.05"	"1.9"	"2.44"	"2.7"
##	[2178]	"2.42"	"2.63"	"1.85"	"1.9"	"3.1"	"2.6"	"2.25"
##	[2185]	"1.75"	"1.8"	"2.8"	"2.82"	"3.27"	"2.15"	"2.22"
##	[2192]	"2.5"	"1.15"	"1.05"	"2.1"	"2.15"	"2.9"	"2.72"
##	[2199]	"2.76"	"2.6"	"2.55"	"3.6"	"3.8"	"4.2"	"2.24"
##	[2206]	"2.5"	"2.9"	"2.48"	"2.33"	"2.2"	"2.35"	"2.35"
##	[2213]	"2.55"	"2.64"	"1.12"	"1.15"	"1.5"	"1.44"	"1.78"
##	[2220]	"2.44"	"2.1"	"2.2"	"2.1"	"2.08"	"2.3"	"2.5"
##	[2227]	"2.17"	"1.3"	"1.85"	"2.52"	"2.34"	"2.5"	"2.25"
##	[2234]	"2.44"	"1.85"	"1.88"	"1.9"	"1.55"	"1.79"	"1.25"
##	[2241]	"1.2"	"1.6"	"1.45"	"1.76"	"1.29"	"1.4"	"1.8"
##	[2248]	"1.84"	"1.95"	"1.96"	"2.2"	"1.85"	"2.15"	"2.23"
##	[2255]	"1.84"	"1.7"	"1.9"	"1.97"	"2.89"	"1.6"	"1.8"
##	[2262]	"2"	"1.9"	"1.81"	"3.44"	"3.1"	"3.6"	"3.34"
##	[2269]	"3.5"	"2.15"	"2.1"	"2.65"	"2.85"	"3.35"	"5.09"
##	[2276]	"5.1"	"5.45"	"5.1"	"4.99"	"4.72"	"4.75"	"4.6"
##	[2283]	"4.45"	"4.9"	"3.99"	"3.9"	"4.1"	"3.75"	"3.95"
##	[2290]	"3.7"	"3.4"	"4.2"	"3.55"	"3.98"	"3.72"	"3.9"
##	[2297]	"4.4"	"4.1"	"4.39"	"2.44"	"2.4"	"2.45"	"2.4"
##	[2304]	"2.47"	"2.3"	"2.15"	"2.35"	"2.45"	"2.85"	"1.84"
##	[2311]	"1.85"	"1.8"	NA	NA	"1.95"	"2"	NA
##	[2318]	"1.8"	NA	"3.96"	"3.95"	"1.6"	"2.8"	"3.1"
##	[2325]	"3.62"	"3.34"	"3.6"	"3.7"	"3.73"	"2.05"	"2.2"
##	[2332]	"2.35"	"2.6"	"2.79"	"2.44"	"2.75"	"2.9"	"3.45"
##	[2339]	"3.39"	"3.95"	"3.85"	"4.75"	NA	"4.63"	"3.19"
##	[2346]	"3.35"	"2.4"	NA	NA	"1.4"	"1.3"	"1.9"
##	[2353]	"1.65"	"1.79"	"1.35"	"1.35"	"1.5"	"1.8"	"1.13"
##	[2360]	"1.94"	"1.96"	"2.2"	"2.3"	"2.87"	"2.1"	"2.16"
##	[2367]	"3"	"2.7"	"3.12"	"1.25"	"1.15"	"1.7"	"2"
##	[2374]	"2.05"	"2.17"	"2.25"	"2.65"	"1.9"	"2.23"	"2.47"
##	[2381]	"2.5"	"3.1"	"2.4"	"2.83"	"2.95"	"2.79"	"3.25"

##	[2388]	"3"	"2.86"	"2"	"2.21"	"2.4"	"1.15"	NA
##	[2395]	"2.3"	"2.46"	"2.07"	"2.95"	"3.45"	"2.3"	"2.4"
##	[2402]	"2.25"	"2.45"	"2.23"	"2.72"	"2.75"	"2.6"	"3.22"
##	[2409]	"3.44"	"2.62"	"2.62"	"2.7"	"2.9"	"2.23"	"2.89"
##	[2416]	"3.15"	"2.9"	"2.8"	"2.7"	"2.54"	"2.75"	"2.35"
##	[2423]	"2.2"	"2.59"	"2.82"	"2.75"	"3.2"	"3"	"3.21"
##	[2430]	"2.1"	"1.9"	"1.85"	"1.6"	"1.75"	"2.15"	"1.8"
##	[2437]	"2.1"	"1.97"	"1.92"	"1.89"	"1.6"	"1.82"	"1.8"
##	[2444]	"2"	"2.85"	"1.85"	"2.65"	"2.75"	"2.78"	"1.15"
##	[2451]	"1.05"	"1.6"	"1.6"	"1.4"	"2.38"	"2.22"	"2.4"
##	[2458]	"2.12"	"2.23"	"2.12"	"1.25"	"2.2"	"1.55"	"2.12"
##	[2465]	"2.34"	"2.23"	"2.35"	"2.1"	"2.5"	"1.5"	"1.45"
##	[2472]	"1.7"	"1.3"	"1.5"	"2.7"	"2.85"	"3"	"2.5"
##	[2479]	"3.35"	"1.43"	"1.45"	"2"	"1.75"	"2.55"	"1.7"
##	[2486]	"1.7"	"1.8"	"0.85"	"1.35"	"2.33"	"1.6"	"1.9"
##	[2493]	"2.05"	"1.83"	"1.15"	"1.16"	"1.2"	NA	NA
##	[2500]	"1.9"	"1.91"	"1.55"	"1.7"	"1.78"	"5.81"	"5.85"
##	[2507]	"5.2"	"5.37"	"5.28"	"5.34"	"5.6"	"6.9"	"4.9"
##	[2514]	"5.05"	"1.25"	"1.35"	"1.6"	NA	NA	"1.2"
##	[2521]	"1.4"	"1.4"	"0.9"	NA	"1.94"	"2"	"1.9"
##	[2528]	"1.9"	"1.9"	"1.65"	"1.8"	"1.6"	"1.5"	"1.52"
##	[2535]	"2.59"	"2.3"	"2.7"	"2.5"	"2.77"	"3.17"	"3.15"
##	[2542]	"3.15"	"3"	"3"	"2.76"	"2.65"	"3.3"	"3.7"
##	[2549]	"3.55"	"2.64"	"2.55"	"2.8"	"3.5"	"3.55"	"2.39"
##	[2556]	"2.2"	"2.7"	"3"	"2.95"	"3.16"	"2.9"	"3.3"
##	[2563]	"3.4"	"3.21"	"2.3"	"2.35"	"2.35"	"2.2"	"2.35"
##	[2570]	"4.65"	"4.7"	"5.1"	"4.9"	"4.56"	"2.8"	"3.06"
##	[2577]	"3"	"3.3"	"3.65"	"2.65"	"2.75"	"3.2"	"3.5"
##	[2584]	"3.95"	"3.1"	"3.35"	"3.25"	"3.3"	"3.75"	"2.2"
##	[2591]	"2.36"	"2.75"	"2.6"	"2.9"	"2"	"2.15"	"2.35"
##	[2598]	"2.5"	"2.8"	"3"	"3.7"	"3.8"	"3.2"	"3.75"
##	[2605]	"3.2"	"3.35"	"3.7"	"4.6"	"4.29"	"1.77"	"1.3"
##	[2612]	"2.35"	"3.6"	"2.7"	"3.21"	"3.05"	"3.6"	"3.5"
##	[2619]	"3.4"	"2.4"	"2.37"	"3"	"3.25"	"3.15"	"3.25"
##	[2626]	"3.45"	"4.9"	"3.2"	"4.87"	"3.54"	"2.7"	"3.35"
##	[2633]	"3.6"	"3.65"	"2.3"	"2.9"	"3.47"	"3.65"	"3.76"
##	[2640]	"3.6"	"3.55"	"4"	"3.4"	"3.85"	"2.17"	"2.2"
##	[2647]	"3"	"3.3"	"3.49"	"3.15"	"3"	"3.2"	"3.1"
##	[2654]	"3.35"	"3.12"	"3.2"	"3.45"	"3.45"	"3.4"	"2.6"
##	[2661]	"2.9"	"3"	"3"	"3.35"	"2.3"	"2.7"	"2.9"
##	[2668]	"2.8"	"2.95"	"2.45"	"2.85"	"2.55"	"2.6"	"2.8"
##	[2675]	"1.94"	"1.9"	"1.9"	"1.7"	"1.92"	"1.44"	"1.42"
##	[2682]	"1.5"	"1.4"	"1.45"	"2.06"	"2.04"	"2"	"2"
##	[2689]	"2.1"	"2.38"	"2.1"	"2.45"	"2.2"	"2.32"	"1.77"
##	[2696]	"2.1"	"2.3"	"2.2"	"2.3"	"2.58"	"2.34"	"2.65"
##	[2703]	"2.6"	"2.87"	"2.17"	"2.3"	"2.7"	"2.5"	"3.09"
##	[2710]	"1.62"	"1.5"	"2.1"	"2.1"	"2.45"	"2.49"	"2.15"
##	[2717]	"2.7"	"2.6"	"2.75"	"1.59"	"2"	"2.6"	"2.6"
##	[2724]	"2.55"	"4.45"	"4.1"	"4.6"	"3.9"	"4.41"	"3.37"
##	[2731]	"3.3"	"5"	"3.3"	"4.5"	"1.8"	"1.8"	"2.8"
##	[2738]	NA	"3.85"	"1.25"	"1.4"	"1.6"	"1.95"	"2.19"
##	[2745]	"0.44"	NA	NA	NA	NA	"2.45"	"2.4"
##	[2752]	"2.3"	"2.5"	"2.37"	"3.22"	"3.19"	"2.95"	"3.25"
##	[2759]	"3.82"	"2.95"	"3"	"2.45"	"3.1"	"3.49"	"3.34"

##	[2766]	"3.32"	"3.55"	"3.8"	"4.76"	"4.46"	"4.2"	"3.1"
##	[2773]	"4.2"	"4.12"	"2.24"	"2.25"	"2.5"	"2.8"	"2.36"
##	[2780]	"2.64"	"2.57"	"2.9"	"2.5"	"3.38"	"3.55"	"3.34"
##	[2787]	"3.3"	"3.7"	"4.03"	"3.65"	"3.45"	"3.85"	"4"
##	[2794]	"3.77"	"1.77"	"1.74"	"2.15"	"2.3"	"2.79"	"1.52"
##	[2801]	"1.9"	"2.35"	"3.37"	"2.73"	"2.99"	"3.25"	"2.35"
##	[2808]	"3.84"	"4.15"	"3.03"	"3.3"	"3.85"	"3.75"	"4.46"
##	[2815]	"1.85"	"2.1"	"2.34"	"2.9"	"3.02"	"1.43"	"1.5"
##	[2822]	"1.5"	"1.55"	"1.63"	"2.15"	"2.2"	"2.3"	"2.15"
##	[2829]	"2.4"	"4.23"	"4.8"	"4.05"	"4.3"	"4.48"	"2.21"
##	[2836]	"2.14"	"2.35"	"2.35"	"2.73"	"2.25"	"2.4"	"2.8"
##	[2843]	"2.8"	"3.02"	"2.02"	"2.4"	"2.65"	"2.9"	"3.13"
##	[2850]	"1.95"	"2.34"	"2.04"	"2"	"2"	"2.7"	"2.92"
##	[2857]	"3.34"	"3"	"2.94"	"2.24"	"2.9"	"2.87"	"2.5"
##	[2864]	"2.95"	"2.1"	"2.35"	"2.25"	"2.35"	"2.77"	"3.2"
##	[2871]	"3.54"	"3.65"	"3.65"	"3.64"	"1.7"	"1.5"	"1.75"
##	[2878]	"1.95"	"2.89"	"2.16"	"2.15"	"2.5"	"2.55"	"2.23"
##	[2885]	"3.02"	"3.35"	"3.15"	"3.25"	"3.29"	"2.95"	"3.24"
##	[2892]	"3.15"	"3.45"	"3.84"	"2.9"	"2.92"	"3.05"	"3.15"
##	[2899]	"3.77"	"1.79"	"2.1"	"2.2"	"2.6"	"2.55"	"1"
##	[2906]	"1.2"	"1.6"	"1.8"	"1.92"	"1.2"	"0.95"	"1.2"
##	[2913]	"1.5"	"1.75"	"1.5"	"1.6"	"2.15"	"2.5"	"2.85"
##	[2920]	"1.94"	"2.3"	"2.34"	"2.5"	"2.39"	"2.67"	"2.95"
##	[2927]	"2.84"	"2.7"	"2.96"	"2.7"	"2.55"	"2.82"	"2.8"
##	[2934]	"2.92"	"2.89"	"2"	"2.45"	"2.65"	"2.8"	"1.89"
##	[2941]	"2.4"	"2.75"	"2.8"	"2.83"	"2.88"	"2.95"	"3"
##	[2948]	"3.1"	"3.14"	"2.89"	"3.3"	"3.25"	"2.95"	"2.72"
##	[2955]	"0.58"	"1.05"	"1.75"	"1.7"	"1.87"	"3.46"	"3.55"
##	[2962]	"3.4"	"4.1"	"4.89"	"2.85"	"3.12"	"3.55"	"3.65"
##	[2969]	"4.2"	"1.6"	"1.7"	"1.85"	"1.62"	"2.84"	"4.35"
##	[2976]	"4.15"	"4.22"	"4.15"	"4.45"	"2.1"	"2.25"	"2.25"
##	[2983]	"2.15"	"2.55"	"2.65"	"2.8"	"2.6"	"2.24"	"2.69"
##	[2990]	"1.4"	"1.4"	"1.6"	"1.46"	"1.6"	"2.8"	"2.9"
##	[2997]	"3.03"	"2.9"	"2.8"	"2.5"	"2.55"	"2.6"	"2.45"
##	[3004]	"2.9"	"2.15"	"2.22"	"2.15"	"2.2"	"2.28"	"2.21"
##	[3011]	"2.8"	"3"	"3.12"	"4.2"	"1.91"	"2"	"2.1"
##	[3018]	"2"	"2.95"	"1.96"	"2.95"	"2.11"	"2.25"	"3"
##	[3025]	"1.87"	"1.9"	"2.05"	"2.2"	"2.5"	"2.7"	"2.48"
##	[3032]	"2.7"	NA	NA	"1.74"	"1.75"	"2.02"	"1.98"
##	[3039]	"2.58"	"4.46"	"3.84"	"4.6"	"4.1"	"4.5"	"4.05"
##	[3046]	"3.8"	"4.3"	"3.9"	"4.35"	"2.6"	"2.35"	"2.95"
##	[3053]	"2.9"	"3.55"	"1.18"	"1.45"	"1.7"	"2.05"	"2.3"
##	[3060]	"1.87"	"1.9"	"2.15"	"2.3"	"2.93"	"3.23"	"3.25"
##	[3067]	"3.65"	"3.35"	"3.55"	"1.45"	"1.5"	"1.5"	"1.45"
##	[3074]	"2.23"	"1.65"	"1.75"	"2"	"1.75"	"3.27"	"1.85"
##	[3081]	"1.7"	"2.85"	"2.1"	NA	"2.24"	"1.85"	"2.3"
##	[3088]	"2.1"	"2.2"	"2.57"	"2.1"	"2.43"	"2"	"2.23"
##	[3095]	"2.5"	"2.54"	"2.6"	"2.6"	"2.75"	"1.85"	"2.15"
##	[3102]	"2.34"	"2.2"	"2.2"	"1.69"	"1.4"	"1.4"	"1.25"
##	[3109]	"1.8"	"1.85"	"2.05"	"1.96"	"1.9"	"1.95"	"1.4"
##	[3116]	"1.2"	"1.6"	"1.8"	"2.15"	"1.15"	"1.3"	"1.5"
##	[3123]	"1.55"	"1.82"	"1"	"1.4"	"1.6"	"1.52"	"1.65"
##	[3130]	"1.65"	"1.7"	"1.65"	"1.6"	"1.6"	"2.25"	"2.5"
##	[3137]	"2.4"	"2.5"	"2.7"	"2.64"	"2.65"	"3.3"	"3.18"

##	[3144]	"3.47"	"1.79"	"1.75"	"1.95"	"2.25"	"2.65"	"0.77"
##	[3151]	"0.8"	"0.8"	NA	NA	"1.1"	"1"	"1.2"
##	[3158]	"1.4"	"1.48"	"4.25"	"4"	"4.65"	"4.2"	"5.17"
##	[3165]	"4.69"	"4.8"	"4.65"	"4.3"	"4.7"	"4.16"	"4.54"
##	[3172]	"4.86"	"4.9"	"5.1"	"2.56"	"2.7"	"2.66"	"2.71"
##	[3179]	"2.63"	"2.16"	"1.95"	"2.1"	"2.23"	"2.65"	"2.98"
##	[3186]	"1.65"	"2.9"	"2.9"	"3.27"	"3"	"2.9"	"3"
##	[3193]	"3.25"	"2.82"	"2.36"	"2.4"	"2.68"	"3.1"	"3.16"
##	[3200]	"3.53"	"3.4"	"3.49"	"3.83"	"3.28"	"3.43"	"3.3"
##	[3207]	"3.1"	"3.5"	"3"	"1.48"	"1.6"	"1.6"	"1.6"
##	[3214]	"1.73"	"1.14"	"0.95"	"1.45"	"1.3"	"1.64"	"1.9"
##	[3221]	"1.94"	"1.94"	"1.9"	NA	"2.77"	"2.85"	NA
##	[3228]	"3.1"	NA	"1.4"	"1.6"	"1.5"	NA	NA
##	[3235]	"2.04"	NA	"2.55"	"2.85"	"3.1"	"3.09"	"2.5"
##	[3242]	"2.8"	NA	"2.99"	"1.45"	"1.65"	"1.6"	"1.6"
##	[3249]	"1.83"	"1.65"	"1.8"	"0.84"	"1.7"	"1.76"	"2.05"
##	[3256]	"1.9"	"2.1"	"2.3"	NA	"2.51"	"2.4"	"2.6"
##	[3263]	"2.83"	"2.65"	"2"	"1.8"	"1.85"	"2"	"1.85"
##	[3270]	"1.19"	"1.35"	"1.35"	"1.1"	"1.35"	"1.87"	"1.9"
##	[3277]	"1.79"	"1.95"	"1.91"	"2.05"	"2.1"	"2"	"1.95"
##	[3284]	"1.77"	"2"	"1.25"	"0.65"	"2.05"	NA	"2.47"
##	[3291]	"2"	"1.8"	"2.6"	"1.2"	"2.2"	"2.52"	"3.41"
##	[3298]	"2.8"	"2.05"	"1.46"	"1.55"	"1.6"	"1.6"	"1.4"
##	[3305]	"1.63"	"1.7"	"1.7"	"1.75"	"1.7"	"1.95"	"2.05"
##	[3312]	"1.8"	"1.9"	"1.85"	"2.65"	"2.74"	"2.49"	"2.1"
##	[3319]	"1.93"	"2.6"	"2.24"	"2.25"	"2.61"	"1.98"	"1.55"
##	[3326]	"1.1"	"1.45"	"1.65"	"1.67"	"2.82"	"2.52"	"2.65"
##	[3333]	"2.65"	"2.45"	"1.32"	"1.4"	"1.4"	"1.5"	"1.57"
##	[3340]	"1.4"	"1.5"	"1.45"	"1.6"	"1.35"	"1.3"	"1.3"
##	[3347]	"1.4"	"1.35"	"1.3"	"1.85"	"1.8"	"1.8"	"1.9"
##	[3354]	"1.79"	"1.8"	"1.85"	"2.15"	"1.25"	"1.3"	"1.7"
##	[3361]	"1.85"	"1.9"	"1.85"	"1.98"	"1"	"1.3"	"1.45"
##	[3368]	"1.5"	"1.65"	"0.95"	NA	"1.2"	NA	NA
##	[3375]	"4.12"	"4.48"	"4.2"	"4.2"	"3.77"	"2.95"	"3.14"
##	[3382]	"3.25"	"3.05"	"3.1"	"5.44"	"3.8"	"5.24"	"5.45"
##	[3389]	"4.35"	"5.7"	"6.6"	"6.44"	"5.7"	"6.44"	"4.75"
##	[3396]	"4.9"	"4.17"	"3.95"	"3.87"	"2.4"	"2.57"	"2.8"
##	[3403]	"2.55"	"3.4"	"2.05"	"2.25"	"2"	"1.9"	"2.2"
##	[3410]	"2.34"	"2.7"	"3"	"3.15"	"2.85"	"1.9"	"2.15"
##	[3417]	"2.1"	"2.45"	"3.2"	"3.75"	"3.37"	"3.15"	"2.75"
##	[3424]	"3.38"	"2.15"	"2.25"	"2.65"	"2.42"	"3.15"	"2.25"
##	[3431]	"2.25"	"2.35"	"2.12"	"2.8"	"2.45"	"2.65"	"2.95"
##	[3438]	"2.52"	"3"	"2.94"	"2.95"	"2.9"	"2.95"	"2.55"
##	[3445]	"2.05"	"2.4"	"2.6"	"2.6"	"3.15"	"2.55"	"2.74"
##	[3452]	"2.8"	"2.7"	"3.27"	"2.44"	"2.2"	"2.55"	"2.5"
##	[3459]	"3.39"	"2.62"	"2.5"	"3.8"	"2.8"	"3.55"	"2.4"
##	[3466]	"2.55"	"2.8"	"2.65"	"3.39"	"1.8"	"1.7"	"1.85"
##	[3473]	"1.8"	"2.3"	"2.15"	"2.08"	"2.1"	"1.85"	"2.3"
##	[3480]	"2.3"	"2.74"	"2.95"	"3.45"	"3.15"	"2.84"	"1.9"
##	[3487]	"2.79"	"3.3"	"4.06"	"1.6"	"1.6"	"1.6"	"1.55"
##	[3494]	"1.8"	"2.15"	"2.22"	"2.2"	"1.9"	"2.47"	"2.65"
##	[3501]	"2.95"	"3.1"	"2.6"	"3"	"2.95"	"2.5"	"3.14"
##	[3508]	"1.9"	"2"	"2.74"	"3.4"	"3.3"	"3.2"	"3.45"
##	[3515]	"2.82"	"3.15"	"3.74"	"3.6"	"4.3"	"2.45"	"2.54"

##	[3522]	"2.7"	"2.4"	"2.95"	"1.94"	"2.15"	"2.25"	"2.45"
##	[3529]	"2.5"	"2.8"	"2.95"	"3.55"	"3.15"	"4.25"	"3.2"
##	[3536]	"3.6"	"3.7"	"3.8"	"3.6"	"2.62"	"2.84"	"2.8"
##	[3543]	"2.9"	"3.18"	"2.05"	"2.1"	"2.1"	"1.98"	"2.45"
##	[3550]	"1.62"	"1.7"	"2"	"2.2"	"2.35"	"1.25"	"1.4"
##	[3557]	"1.6"	"1.7"	"2.35"	"2.79"	"2.85"	"2.8"	"2.6"
##	[3564]	"2.5"	"1.44"	"1.4"	"1.3"	"1.45"	"1.49"	"1.3"
##	[3571]	"1.6"	"1.7"	"1.55"	"1.45"	"0.95"	"1.05"	"1.1"
##	[3578]	"1.4"	"1.07"	"1.53"	"1.5"	"1.7"	"1.85"	"2.2"
##	[3585]	"2.59"	"2.6"	"2.65"	"2.75"	"2.15"	"2.17"	"2.15"
##	[3592]	"2.5"	"2.2"	"2.64"	"2.27"	"2.5"	"2.8"	"1.9"
##	[3599]	"2.49"	"5.44"	"5.14"	"5.55"	"5.5"	"5.78"	"4.16"
##	[3606]	"5.2"	"5.07"	"4.8"	"5.39"	"2.74"	"2.74"	"3"
##	[3613]	"3.1"	"3.6"	"1.42"	"1.6"	"1.8"	"1.8"	"1.9"
##	[3620]	"3.1"	"3.25"	"3.25"	"2.82"	"3"	"2.5"	"2.7"
##	[3627]	"3"	"2.55"	"2.9"	"1.8"	"2.04"	"2.25"	"2.2"
##	[3634]	"2.9"	"2.25"	"2.45"	"2.35"	"2.2"	"2.53"	"2"
##	[3641]	"2.1"	"2.35"	"2.3"	"2.7"	"1.9"	"1.92"	"2.4"
##	[3648]	"2.65"	"2.86"	"2.25"	"2.3"	"2.5"	"2.55"	"3.3"
##	[3655]	"2.94"	"3.1"	"3.37"	"3.4"	"3.6"	"2.45"	NA
##	[3662]	"2.6"	"2.5"	"3"	"2.55"	NA	"3.1"	"2.72"
##	[3669]	"3.36"	"1.8"	NA	"2.12"	"2.3"	"2.8"	"1.85"
##	[3676]	NA	"2.25"	"2.7"	"3.37"	"3.45"	NA	"3.9"
##	[3683]	"4.05"	"4.45"	"3.1"	NA	"3.9"	"3.75"	"3.95"
##	[3690]	"3.1"	NA	"3.55"	"4.25"	"4.3"	"1.95"	NA
##	[3697]	"2.62"	"4.5"	"3.3"	"1.9"	NA	"2.2"	"3"
##	[3704]	"2.9"	"2.8"	NA	"3.25"	"3.5"	"3.3"	"2.6"
##	[3711]	"2.85"	"3.6"	"3.35"	"3.6"	"1.6"	"1.75"	"2.1"
##	[3718]	"2"	"1.95"	"1.7"	"1.7"	"2.8"	"1.47"	"1.8"
##	[3725]	"2.8"	"2.54"	"2.65"	"2.45"	"2.4"	"2.62"	"2.7"
##	[3732]	"3.15"	"2.85"	"3"	"1.8"	"1.75"	"1.85"	"1.8"
##	[3739]	"2.25"	"2.42"	"2.35"	"2.6"	"1.79"	"1.93"	"2.37"
##	[3746]	"2.54"	"2.95"	"3"	"2.92"	"2.45"	"2.7"	"2.45"
##	[3753]	"2.7"	NA	"2.52"	"2.15"	"2.6"	"2.55"	"1.5"
##	[3760]	"1.3"	"1.4"	"1.6"	"1.5"	"1.55"	"1.92"	"1.95"
##	[3767]	"2.1"	"1.85"	"1.99"	"2.05"	"2.94"	"1.95"	"1.8"
##	[3774]	"2.07"	"2.2"	"2.3"	"2.3"	"2.05"	"2.2"	"1.96"
##	[3781]	"2"	"2.65"	"2.8"	"3"	"1.61"	"1.74"	"2.05"
##	[3788]	"2.3"	"2.7"	"2.46"	"2.23"	"2.05"	"2.7"	"2.9"
##	[3795]	"2.19"	"2.05"	"2.4"	"2.3"	"2.8"	"1.99"	"2"
##	[3802]	"2.5"	"2.3"	"2.6"	"2.34"	"2.3"	"2.42"	"2.4"
##	[3809]	"2.6"	"4.16"	NA	"5"	"4.35"	"5"	"3.2"
##	[3816]	NA	"4.1"	"4.32"	"5"	"3.15"	NA	"4"
##	[3823]	"3.65"	"4"	"4.94"	NA	"4.92"	"5.3"	"5"
##	[3830]	"5.18"	NA	"5.7"	"5.32"	"4.2"	"2.15"	"2.1"
##	[3837]	"2.54"	"2.33"	"2.49"	"2.17"	"2.24"	"2.55"	"2.55"
##	[3844]	"3.5"	"2.75"	"2.7"	"2.8"	"2.75"	"3.8"	"2.68"
##	[3851]	"2.48"	"2.7"	"2.75"	"2.7"	"2.2"	"2.35"	"2.6"
##	[3858]	"2.65"	"2.85"	"2.75"	"2.8"	"2.65"	"2.35"	"2.65"
##	[3865]	"3.45"	"3.34"	"3.3"	"3.3"	"3.9"	"1.37"	"1.35"
##	[3872]	"1.55"	"1.25"	"1.1"	"3.4"	"3.08"	"3.05"	"3.1"
##	[3879]	"3.5"	"1.37"	"1.3"	"1.5"	"1.22"	"1.53"	"3.15"
##	[3886]	"3.1"	"3.5"	"3.6"	"4.3"	"2.82"	"2.95"	"2.9"
##	[3893]	"3"	"3"	"2.72"	"2.21"	"2.6"	"2.55"	"3.3"

## [3900]	"2.7"	"2.95"	"3.04"	"2.87"	"3.6"	"3.65"	"3.65"
## [3907]	"3.4"	"3.5"	"4"	"2.65"	"2.41"	"2.8"	"3.1"
## [3914]	"3.88"	"2.3"	"2.23"	"2.4"	"2.4"	"2.4"	"1.95"
## [3921]	"1.9"	"2"	"2"	"2.15"	"2.3"	"2.22"	"2.57"
## [3928]	"2.64"	"3"	"1.85"	"1.84"	"1.94"	"1.6"	"1.9"
## [3935]	"3.2"	"2.7"	"2.94"	"2.95"	"2.6"	"1.55"	"1.6"
## [3942]	"1.85"	"1.55"	"3.35"	"2.26"	"2.3"	"2.2"	"2.1"
## [3949]	"1.78"	"2.47"	"2.54"	"2.75"	"2.4"	"2.48"	"2.35"
## [3956]	"2.34"	"2.15"	"1.5"	"2.25"	"2.2"	"2.3"	"2.4"
## [3963]	"2.35"	"2.57"	"1.94"	"1.8"	"1.3"	"1.47"	"1.48"
## [3970]	"1.42"	"1.35"	"1.95"	"2.3"	"2.35"	"2.65"	"2.74"
## [3977]	"3"	"2.94"	"3"	"2.15"	"2.18"	"2.04"	"2.15"
## [3984]	"2"	"1.44"	"1"	"1.9"	"2.3"	"3.05"	"2.35"
## [3991]	"2.2"	"2.3"	"2.14"	"3.05"	"3.7"	"1.85"	"3"
## [3998]	"3.1"	"4.05"	"2.25"	"2.24"	"2.2"	"2.4"	"2.9"
## [4005]	"1.35"	"1.3"	"1.4"	"1.64"	"1.95"	"2.8"	"2.8"
## [4012]	"2.9"	"2.7"	"2.72"	"1.51"	"1.4"	"1.65"	"1.55"
## [4019]	"1.75"	"3.6"	"3.24"	"3.87"	"3.7"	"4.15"	"1.95"
## [4026]	"1.7"	"1.95"	"1.82"	"2.6"	"1.46"	"1.45"	"1.55"
## [4033]	"1.55"	"1.85"	"3.9"	"3.6"	"3.95"	"3.65"	"3.85"
## [4040]	"2.8"	"2.76"	"2.9"	"2.38"	"3.05"	"2.5"	"2.59"
## [4047]	"2.55"	"2.25"	"3.39"	"2.4"	"2.9"	"2.85"	"2.54"
## [4054]	"2.95"	"2.12"	"1.73"	"1.95"	"1.9"	"2.49"	"1.55"
## [4061]	NA	NA	NA	NA	"2.2"	"2.05"	"2.3"
## [4068]	"2.15"	"2.7"	"2.5"	"2.51"	"2.3"	"2.1"	"1.78"
## [4075]	"2.6"	"3"	"3"	"2.75"	"2.75"	"2.7"	"2.54"
## [4082]	"2.3"	"2.2"	"3.06"	"2.2"	"1.9"	"1.95"	"2.1"
## [4089]	"2.55"	"1.45"	"2.15"	"2.14"	"1.67"	"1.96"	"1.9"
## [4096]	"1.75"	NA	NA	NA	"2"	"2.15"	"2.45"
## [4103]	"2.87"	"2.23"	"1.6"	"1.64"	"1.85"	"1.5"	"1.6"
## [4110]	"1.9"	"1.8"	"3.2"	"2.85"	"3.58"	"1.87"	"1.85"
## [4117]	"1.9"	"2.7"	"1.78"	"2.95"	"2.7"	"2.3"	"2.42"
## [4124]	"2.35"	"2.25"	"2.08"	"2.05"	"2.4"	"2"	"1.9"
## [4131]	"1.64"	"1.8"	"0.5"	"1.21"	"1.68"	"1.72"	"1.9"
## [4138]	"2.2"	"2.4"	"1.54"	"1.6"	"1.7"	NA	NA
## [4145]	"2.56"	"1.97"	"2.05"	"2.35"	"2.22"	"1.52"	"1.48"
## [4152]	"1.3"	NA	NA	"1.05"	"1"	"1.3"	"1.1"
## [4159]	"1.5"	"2.2"	"2.11"	"2.1"	NA	NA	"1.9"
## [4166]	"1.6"	"1.8"	"1.45"	"1.54"	"2.35"	"2.24"	"2.5"
## [4173]	"2.3"	"2.45"	"1.25"	"1.25"	"1.3"	"1.2"	"1.22"
## [4180]	"2.11"	"2.12"	"2.05"	"0.96"	"2.2"	"1"	"1.1"
## [4187]	"1.05"	"1.98"	"0.95"	"3.4"	"2.8"	"2.65"	"2.3"
## [4194]	"3.15"	"2.4"	"2.12"	"2.8"	"3"	"3.58"	"2.15"
## [4201]	"2.1"	"2.2"	"2.4"	"2.92"	"2.95"	"3.1"	"3.1"
## [4208]	"3.2"	"3.64"	"1.45"	"1.45"	"2.6"	"1.7"	"2.42"
## [4215]	"2.54"	"2.65"	"2.6"	"2.15"	"3.1"	"2.54"	"2.75"
## [4222]	"2.5"	"2.5"	"2.78"	"2.55"	"2.7"	"2.9"	"2.55"
## [4229]	"2.99"	"0.96"	"1.1"	"1.1"	"0.9"	"1.65"	"3.62"
## [4236]	"3.45"	"3.9"	"4"	"4.2"	"1.8"	"1.85"	"2.6"
## [4243]	"3.1"	"3.03"	"2.85"	"3.8"	"4"	"4.35"	"4.29"
## [4250]	"3.62"	"3.6"	"4.2"	"4.6"	"4.41"	"2.23"	"2.4"
## [4257]	"2.8"	"2.6"	"2.65"	"2.05"	"2"	"2.3"	"2.8"
## [4264]	"3.06"	"2.41"	"2.84"	"2.8"	"2.65"	"3.73"	"2.3"
## [4271]	"2.1"	"2.2"	"2.3"	"2.98"	"1.94"	"1.9"	"2"

##	[4278]	"2"	"2.31"	"4.19"	"3.84"	"3.95"	"3.6"	"4.24"
##	[4285]	"3.04"	"3"	"3.4"	"3.2"	"3.31"	"2.01"	"2.15"
##	[4292]	"2.3"	"2.2"	"2.64"	"1.93"	"1.9"	"1.95"	"2.1"
##	[4299]	"2.36"	"2.57"	"1.85"	"3.1"	"3"	"3.35"	"2.75"
##	[4306]	"2.55"	"2.55"	"2.5"	"2.53"	"1.84"	"2"	"1.95"
##	[4313]	"2"	"1.85"	"2.18"	"2.05"	"2.1"	"2"	"1.97"
##	[4320]	"2.05"	"2.55"	"1.85"	"2.2"	"4.66"	"2.34"	"2.25"
##	[4327]	"2.85"	"2.4"	"3.27"	"2.12"	"2.9"	"2"	"3.1"
##	[4334]	"4.45"	"1.81"	"1.85"	"1.95"	"2"	"2.35"	"2.39"
##	[4341]	"2.1"	"2"	"2.2"	"2.83"	"1.5"	"1.65"	"1.6"
##	[4348]	"1.7"	"2.27"	"1.4"	"1.35"	"1.6"	"1.75"	"2.1"
##	[4355]	"1.85"	"2.62"	"2.15"	"2.15"	"2.28"	"1.04"	"1.15"
##	[4362]	"1.4"	"1.4"	"1.91"	"1.9"	"1.85"	"2"	"2"
##	[4369]	"2.16"	"1.18"	"1.3"	"1.4"	"1.4"	"1.64"	"1.47"
##	[4376]	"1.45"	"1.6"	"1.75"	"2.3"	"1.67"	"1.6"	"1.7"
##	[4383]	"2.1"	"2.65"	"1.6"	"1.65"	"1.7"	"1.95"	"2.58"
##	[4390]	"1.14"	"1.1"	"1.1"	"0.6"	"1.21"	"5.92"	"6"
##	[4397]	"5.7"	"5.1"	"5.83"	"3.14"	"3.6"	"4.2"	"3.7"
##	[4404]	"3.99"	"3.56"	"3.8"	"4.2"	"3.8"	"3.63"	"2.6"
##	[4411]	"2.6"	"2.8"	"3"	"3.38"	"2.3"	"2.25"	"2.9"
##	[4418]	"3.3"	"MISSING"	"3.1"	"3.25"	"3.85"	"4"	"4.38"
##	[4425]	"2.5"	"2.47"	"2.85"	"2.65"	"2.42"	"2.1"	"2.14"
##	[4432]	"3.43"	"3.6"	"MISSING"	"2.75"	"2.55"	"3.37"	"3.5"
##	[4439]	"3.85"	"1.5"	"1.62"	"1.8"	"1.7"	"2.33"	"1.8"
##	[4446]	"1.72"	"1.89"	"1.8"	"2.4"	"1.85"	"1.82"	"2"
##	[4453]	"2"	"2.35"	"2.1"	"2.15"	"3.39"	"3.42"	"3.7"
##	[4460]	"1.45"	"1.25"	"2.19"	"3.75"	"1.69"	"1.85"	"2.15"
##	[4467]	"2.85"	"3.1"	"2.98"	"2.15"	"2.35"	"2.79"	"2.75"
##	[4474]	"3.39"	"3"	"2.9"	"3.87"	"3.8"	"4.05"	"2.15"
##	[4481]	"2.2"	"2.37"	"2.45"	"3.1"	"2.6"	"2.51"	"2.85"
##	[4488]	"2.4"	"2.98"	"1.45"	"1.55"	"1.8"	"1.8"	"2.1"
##	[4495]	"2.5"	"3"	"3.07"	"3.49"	"3.53"	"2.15"	"2.49"
##	[4502]	"2.97"	"3.1"	"2.83"	"2.05"	"2.6"	"2.82"	"3"
##	[4509]	"3.67"	"2.3"	"2.9"	"3.1"	"3.35"	"3.8"	"1.5"
##	[4516]	"1.65"	"2.29"	"1.8"	"2.49"	"2.1"	"2.1"	"2.98"
##	[4523]	"2.95"	"3.18"	"2.5"	"2.2"	"2.25"	"2.35"	"2.23"
##	[4530]	"3.25"	"3.35"	"3.6"	"4"	"3.68"	"2.32"	"1.8"
##	[4537]	"2.25"	"2.4"	"MISSING"	"2.37"	"1.9"	"2.87"	"2.2"
##	[4544]	"2.23"	"2.15"	"2.25"	"2.5"	"2.2"	"2.55"	"1.5"
##	[4551]	"1.62"	"1.75"	"1.6"	"1.86"	"2.05"	"2"	"2.7"
##	[4558]	"2.42"	"2.52"	"2.64"	"2.9"	"2.88"	"2.9"	"2.87"
##	[4565]	"1.4"	"1.55"	"1.5"	"1.7"	"2.06"	"1.35"	"1.25"
##	[4572]	"1.2"	"1.6"	"1.87"	"1.5"	"1.5"	"1.7"	"1.7"
##	[4579]	"1.79"	"1.9"	"2.1"	"2.25"	"2.1"	"2.39"	"2.1"
##	[4586]	"2.15"	"2.3"	"2.06"	"2.18"	"1.9"	"1.75"	"1.75"
##	[4593]	"1.7"	"1.79"	"1.42"	"1.6"	"1.7"	"1.7"	"1.77"
##	[4600]	"1.84"	"1.7"	"2.05"	"1.9"	"2.09"	"1.9"	"1.82"
##	[4607]	"2.37"	"1.95"	"1.98"	"1.35"	"1.25"	"1.4"	"1.45"
##	[4614]	"1.1"	"2.54"	"3.31"	"3.16"	"3.65"	"3.78"	"4.17"
##	[4621]	"4.4"	"4.72"	"4.55"	"4.1"	"3.12"	"3.55"	"4"
##	[4628]	"4"	"4.09"	"3.6"	"3.9"	"3.99"	"3.2"	"3.34"
##	[4635]	"1.9"	"2.52"	"2.45"	"2.25"	"2.71"	"3.81"	"4.02"
##	[4642]	"4.89"	"4.3"	"4.53"	"4.67"	"5.1"	"4.84"	"4.25"
##	[4649]	"4.8"	"3.44"	"3.75"	"4.39"	"5.1"	"5.26"	"1.45"

##	[4656]	"1.35"	"1.4"	"1.55"	"1.59"	"3.14"	"3.92"	"4.6"
##	[4663]	"4.55"	"5.12"	"2.5"	"2.85"	"3.55"	"3.52"	"4.19"
##	[4670]	"1.55"	"1.72"	"1.6"	"1.75"	"2.23"	"2"	"2.05"
##	[4677]	"2.3"	"2.35"	"2.99"	"1.84"	"1.94"	"2.6"	"3.2"
##	[4684]	"2.75"	"2.34"	"2.5"	"2.9"	"3.25"	"3.55"	"2.4"
##	[4691]	"2.35"	"2.5"	"2.4"	"2.91"	"2.44"	"2.55"	"3"
##	[4698]	"2.8"	"3.46"	"1.4"	"1.45"	"1.5"	"1.6"	"2.07"
##	[4705]	"3.35"	"3.45"	"3.5"	"3.1"	"4.05"	"1.9"	"1.89"
##	[4712]	"2.1"	"2.07"	"2.62"	"2.7"	"2.72"	"2.9"	"3.15"
##	[4719]	"3.65"	"3.05"	"2.84"	"2.9"	NA	NA	"3.25"
##	[4726]	"3.05"	"3.6"	"3"	"4.07"	"3.8"	"3.85"	"4.3"
##	[4733]	"4.7"	"4.58"	"2.24"	"1.6"	"2.55"	"2.8"	"3.1"
##	[4740]	"4.05"	"4.17"	"4.45"	"4.95"	"2.77"	"3.9"	"4"
##	[4747]	"4.1"	"3.6"	"4.2"	"2.8"	"3.05"	"3.2"	"3.2"
##	[4754]	"3.44"	"1.9"	"1.65"	"1.9"	"1.65"	"1.9"	"1.5"
##	[4761]	"1.45"	"1.6"	NA	NA	"2.8"	"2.07"	"2.9"
##	[4768]	"2.05"	"2.82"	"2.2"	"2.3"	"2.34"	"2.35"	"2.78"
##	[4775]	"3.5"	"3.47"	"3.8"	"3.98"	"4.5"	"2.55"	"2.57"
##	[4782]	"2.9"	"2.95"	"3.68"	"1.43"	"1.7"	"2"	"1.95"
##	[4789]	"1.98"	"1.1"	"0.95"	"2.1"	"1.9"	"2.44"	"1.5"
##	[4796]	"1.5"	"1.9"	"1.59"	"2.43"	"1.8"	"1.75"	"1.8"
##	[4803]	NA	NA	"1.8"	"1.85"	"1.95"	"1.9"	"2.23"
##	[4810]	"2.4"	"2.65"	"3.2"	"3.1"	"3.02"	"1.43"	"1.55"
##	[4817]	"1.5"	"1.6"	"1.65"	"2"	"2.1"	"2.4"	"2.22"
##	[4824]	"2.3"	"3"	"3.13"	"3.35"	"2.95"	"3.32"	"1.8"
##	[4831]	"1.6"	"2.1"	"2"	"2.19"	"2.35"	"2.7"	"3.1"
##	[4838]	"2.9"	"2.95"	"1.34"	"1.4"	"1.6"	"1.7"	"2.15"
##	[4845]	"1.25"	"1.3"	"1.6"	"1.85"	"2.23"	"2.45"	"2.02"
##	[4852]	"2.55"	"2.35"	"3.01"	"2.62"	"3"	"3.2"	"3"
##	[4859]	"2.93"	"4.5"	"5.1"	"5"	"4.75"	"4.6"	"3.4"
##	[4866]	NA	"4.6"	"4.55"	NA	"3.2"	"3.6"	"3.8"
##	[4873]	"3.75"	"4.17"	"1.43"	"1.45"	"1.9"	"1.85"	"2.12"
##	[4880]	"2.24"	"2.24"	"2.55"	"2.65"	"3.05"	"1.55"	"1.55"
##	[4887]	NA	"0.4"	"0.5"	"1.8"	"1.95"	"1.89"	"2.25"
##	[4894]	"2.89"	"1.72"	"1.75"	"1.85"	"1.8"	"0.71"	"2.6"
##	[4901]	"2.7"	"3.19"	"3.65"	"3.75"	"1.5"	"1.64"	"2.19"
##	[4908]	"2.1"	"2.08"	"1.39"	"1.4"	"1.9"	"3.65"	"3.83"
##	[4915]	"1.9"	"1.95"	"2"	"1.95"	"2.25"	"1.84"	"1.9"
##	[4922]	"2.35"	"2.45"	"2.9"	"2.05"	"1.8"	"2.3"	"1.96"
##	[4929]	NA	"1.75"	"2.2"	NA	NA	NA	"1.31"
##	[4936]	"1.1"	"1.5"	"1.6"	"1.73"	"1.15"	"1"	"1.2"
##	[4943]	"1.4"	"0.85"	"1.94"	"1.3"	"2.47"	"2.6"	"2.65"
##	[4950]	"2.25"	"2"	"2.26"	NA	NA	"1.95"	"2"
##	[4957]	"2.3"	"1.56"	"1.25"	"1.8"	"1.6"	"1.8"	"1.7"
##	[4964]	"1.7"	"2.15"	"2"	"1.74"	"1.7"	"2.2"	"1.7"
##	[4971]	"1.5"	"1.85"	"1.72"	"2.25"	"1.95"	"2.54"	"2.48"
##	[4978]	"2.05"	"2.4"	"1.92"	"1.65"	"1.85"	"2.1"	"1.75"
##	[4985]	"1.85"	"1.84"	"1.95"	"2.9"	"2.45"	"1.42"	"1.8"
##	[4992]	"1.4"	"1.45"	"1.79"	"1.35"	"1.72"	"1.88"	NA
##	[4999]	"MISSING"	"1.8"	"2.3"	"3.38"	"3.33"	"3.05"	"2.34"
##	[5006]	"1.9"	"2.23"	"2.29"	"2.1"	"1.84"	"1.9"	"2.38"
##	[5013]	"2.3"	"2.05"	"2.27"	"2.25"	"2.27"	"1.62"	"1.39"
##	[5020]	"2"	"1.92"	"1.52"	"2.05"	"1.82"	"1.82"	"2"
##	[5027]	"1.62"	NA	NA	"1.42"	"1.55"	"1.28"	"1.45"

## [5034]	"1.42"	"1.34"	"1.5"	"2.1"	"1.96"	"2.18"	"2.35"
## [5041]	"2.4"	"2.85"	"2.8"	"2.89"	"1.85"	"1.6"	"1.95"
## [5048]	"1.98"	"0.63"	"1.45"	"1.45"	"1.6"	"1.49"	"1.51"
## [5055]	"1.2"	"1"	"1.35"	"1.1"	"1.5"	"1.42"	"1"
## [5062]	"1.1"	"1"	"1.35"	"1.32"	"1.4"	"1.4"	"1.36"
## [5069]	"1.55"	"2.52"	"2.46"	"2.85"	"2.62"	"2.7"	"1.9"
## [5076]	"2.05"	"2.22"	"2.05"	"3"	"3.05"	"3.3"	"3.35"
## [5083]	"3.46"	"3.75"	"4.9"	"5.3"	"6.01"	"5.54"	"6.08"
## [5090]	"3.54"	"3.8"	"3.82"	"3.36"	"3.24"	"2.8"	"2.8"
## [5097]	"3.1"	"2.8"	"3.55"	"1.4"	"1.5"	"1.6"	"1.45"
## [5104]	"1.68"	"2.59"	"2.55"	"2.65"	"2.25"	"3"	"1.1"
## [5111]	"1.2"	"1.25"	"1.45"	"1.59"	"1.89"	"1.84"	"2.45"
## [5118]	"1.9"	"2.8"	"2.54"	"2.45"	"2.7"	"2.5"	"3.05"
## [5125]	"1.4"	"1.5"	"1.6"	"1.4"	"1.43"	"2.37"	"2.8"
## [5132]	"2.55"	"2.5"	"3.15"	"1.92"	"1.85"	"1.85"	"1.84"
## [5139]	"1.75"	"1.74"	"1.75"	"1.84"	"1.65"	"1.95"	"3.95"
## [5146]	"3.53"	"3.6"	"3.15"	"3.5"	"3.64"	"3.4"	"3.35"
## [5153]	"3.1"	"4.15"	"2.79"	"2.9"	"3.35"	"3.25"	"3.4"
## [5160]	"3.58"	"3.6"	"3.45"	"3"	"3.85"	"2.56"	"2.4"
## [5167]	"2.74"	"2.4"	"3"	"1.4"	"1.3"	"1.5"	"1.45"
## [5174]	"1.82"	"1.8"	"1.6"	"2"	"1.6"	"1.8"	"2.57"
## [5181]	"2.1"	"2.34"	"2.15"	"3.45"	"1.7"	"1.5"	"2.1"
## [5188]	"1.6"	"1.95"	"2.81"	"2.9"	"3.2"	"2.45"	"2.95"
## [5195]	"2.14"	"2.14"	"2.5"	"2.5"	"2.3"	"2.57"	"1.97"
## [5202]	"1.95"	"1.87"	"2.15"	"1.4"	"1.7"	"1.95"	"2.1"
## [5209]	"3.7"	"2.2"	"1.05"	"2.1"	"1.9"	"2.3"	"1.74"
## [5216]	"1.75"	"2.05"	"2.22"	"3.12"	"2.2"	"2.65"	"2.32"
## [5223]	"2.3"	NA	"2.2"	"2"	"2.45"	"2.1"	"2.49"
## [5230]	"1.91"	"1.9"	"2.07"	"2"	"2.52"	"1.3"	"1.3"
## [5237]	"1.4"	"1.2"	NA	"1.15"	"1.1"	"1.65"	"1"
## [5244]	"1.69"	"1.3"	"1.1"	"1.3"	"1.44"	"2.02"	"1.55"
## [5251]	"1.4"	"1.5"	NA	NA	"2.56"	"2.08"	"2.15"
## [5258]	"1.75"	"2.48"	"2.52"	"2.32"	"2.2"	"1.85"	"2.23"
## [5265]	"1.4"	"1.4"	"1.55"	"1.35"	"1.25"	"1.75"	"1.68"
## [5272]	"1.87"	"2"	"2.35"	"1.3"	"1.1"	"1.5"	"1.55"
## [5279]	"1.77"	"1.7"	"1.7"	"1.55"	"1.55"	"1.85"	"1.4"
## [5286]	"1.4"	"1.7"	"1.45"	"1.58"	"1.55"	"1.7"	"1.7"
## [5293]	"1.6"	"1.8"	"4.73"	"4.95"	"4.95"	"3"	"5.25"
## [5300]	"4.2"	"4.3"	"3.74"	"3.6"	"3.8"	"5"	NA
## [5307]	NA	NA	"1.87"	"1.8"	"1.8"	"1.75"	"2.41"
## [5314]	"3.58"	"3.2"	"3.44"	"3.72"	"3.95"	"3.59"	"3.5"
## [5321]	"4.45"	"4.37"	"4.58"	"2.42"	"2.5"	"3.85"	"4"
## [5328]	"4.68"	"2.9"	"2.85"	"3.95"	"4"	"4.78"	"4.3"
## [5335]	"3.7"	"4.85"	"5"	"5.08"	"4.57"	"3.8"	"4.8"
## [5342]	"4.79"	"5.1"	"3.15"	"3.5"	"4.52"	"4.75"	"5.67"
## [5349]	"2.93"	"2.9"	"3.65"	"4.3"	"4.18"	"3.2"	"2.9"
## [5356]	"3.35"	"3.4"	"3.65"	"2.93"	"2.9"	"3.5"	"3.95"
## [5363]	"4.37"	"2.52"	"2.8"	"3.35"	"3.5"	"3.98"	"1.45"
## [5370]	"1.55"	"1.9"	"2.02"	"2.23"	"1.95"	"1.8"	"2.5"
## [5377]	"2.7"	"3.12"	"2.37"	"2.65"	"2.95"	"3.45"	"3.73"
## [5384]	"2.83"	"2.8"	"3.7"	"3.3"	"3.75"	"3.56"	"3.1"
## [5391]	"3.55"	"3.95"	"4.1"	"2.16"	"2.6"	"2.95"	"3"
## [5398]	"4.2"	"2.46"	"2.9"	"3.4"	"3.6"	"4.31"	"2.5"
## [5405]	"2.7"	"3.1"	"3.3"	"3.91"	"1.85"	"2"	"2.4"

##	[5412]	"1.85"	"2.74"	"1.8"	"1.9"	"2.24"	"2.2"	"2.16"
##	[5419]	"1.5"	"1.4"	"2.2"	"1.55"	"1.65"	"1.7"	"1.85"
##	[5426]	"1.85"	"2.1"	"2.53"	"1.7"	"2.1"	"3.05"	"2.65"
##	[5433]	"2.97"	"1.74"	"2.2"	"3.05"	"3.2"	"3.4"	"2.34"
##	[5440]	"2.24"	"6"	"3.8"	"4.83"	"1.56"	"1.8"	"2.65"
##	[5447]	"3.45"	"4.2"	"1.8"	"1.92"	"2.75"	"2.55"	"2.72"
##	[5454]	"2.3"	"2.25"	"3"	"3.15"	"3.74"	"2.41"	"2"
##	[5461]	"2.55"	"2.2"	"2.28"	"2.31"	"2.2"	"2.45"	"2.4"
##	[5468]	"2.39"	"1.15"	"1.2"	"1.25"	"1.3"	"1.42"	"2.91"
##	[5475]	"2.95"	"3.35"	"3.75"	"3.64"	"3.2"	"3.1"	"3.6"
##	[5482]	"4.07"	"4.51"	"2.46"	"2.55"	"3"	"3.05"	"3.72"
##	[5489]	"2.77"	"2.7"	"3.35"	"3.5"	"4.19"	"3.23"	"3.2"
##	[5496]	"3.85"	"3.75"	"4.14"	"3.65"	"3.8"	"4.25"	"3.9"
##	[5503]	"4.74"	"2.74"	"2.87"	"3.2"	"3.4"	"3.81"	"1.74"
##	[5510]	"1.95"	"2.05"	"2.15"	"2.39"	"1.1"	"1.35"	"2"
##	[5517]	"2.08"	"2.15"	"1.65"	"1.25"	"2.3"	"2.42"	"3.12"
##	[5524]	"2.5"	"2.45"	"3.15"	"3.05"	"3.85"	"1.75"	"1.8"
##	[5531]	"2.25"	"2.3"	"2.53"	"2.6"	"2.5"	"3.3"	"3.12"
##	[5538]	"3.49"	"2.45"	"2.8"	"3.12"	"3.7"	"3.94"	"1.15"
##	[5545]	"1"	"1.3"	"1.5"	"1.66"	"1.5"	"1.4"	"1.75"
##	[5552]	"1.72"	"2.23"	"1.6"	"1.4"	"1.9"	"1.8"	"2.37"
##	[5559]	"3.21"	"3.3"	"3.95"	"3.7"	"4.3"	"3.26"	"3"
##	[5566]	"3.7"	"3.7"	"3.98"	"2.95"	"3.1"	"3.8"	"3.55"
##	[5573]	"5.1"	"2.65"	"2.15"	"3.3"	"3.1"	"3.18"	"1.81"
##	[5580]	NA	NA	NA	"3.06"	"2.55"	"2.3"	"2.05"
##	[5587]	"3.5"	"3.92"	"2.75"	"2.6"	"1.9"	"4.5"	"4.52"
##	[5594]	"1.84"	"1.85"	"1.55"	"1.45"	"1.56"	"2.5"	"3"
##	[5601]	"3"	"3.1"	"2.35"	"2.15"	"1.8"	"2.15"	"2.26"
##	[5608]	"2.15"	"1.55"	"1.45"	"2.3"	"2.3"	"2.31"	"1.25"
##	[5615]	"1.8"	"1.9"	"1.6"	"1.73"	"1.81"	"2.02"	"2.55"
##	[5622]	"2.7"	"3.17"	"2.57"	"2.1"	"2.24"	"2.05"	"2.31"
##	[5629]	"2.69"	"2.6"	"2.65"	"2.4"	"2.45"	"1.6"	"1.45"
##	[5636]	"1.6"	"1.6"	"1.9"	"2.1"	"2.1"	"2.1"	"1.9"
##	[5643]	"2.04"	"2.2"	"1.9"	"2.15"	"2.05"	"2.42"	"1.95"
##	[5650]	"1.94"	"2.05"	"1.85"	"2.2"	"1.4"	"1.4"	"1.5"
##	[5657]	"1.7"	"1.85"	"1.85"	"1.9"	"1.9"	"1.9"	"2.06"
##	[5664]	"1.8"	"1.4"	"1.7"	"1.76"	"1.91"	"1.1"	"1.3"
##	[5671]	"1.8"	"1.75"	"1.87"	"2.45"	"2.6"	"3.4"	"3.75"
##	[5678]	"4.25"	"2.16"	"2.4"	"2.7"	"2.6"	"2.93"	"2.66"
##	[5685]	"2.42"	"3.1"	"3.05"	"3.36"	"2.7"	"3"	"3.25"
##	[5692]	"4"	"3.52"	"2.81"	"3"	"3.55"	"3.1"	"3.58"
##	[5699]	"2.8"	"2.8"	"3.35"	"3.25"	"3.91"	"2.99"	"3"
##	[5706]	"3.7"	"3.4"	"4.1"	"2.62"	"2.8"	"3.25"	"2.98"
##	[5713]	"2.93"	"3.5"	"3"	"4.2"	"3.9"	"4.35"	"3.89"
##	[5720]	"3.55"	"4.35"	"4.2"	"4.58"	"3.25"	"3.4"	"4.3"
##	[5727]	"4.3"	"4.72"	"2.67"	"2.81"	"3.05"	"2.9"	NA
##	[5734]	"2.45"	"2.5"	"2.9"	"2.7"	"1.79"	"1.75"	"1.9"
##	[5741]	"2.3"	"1.8"	"2.05"	"2.5"	"2.05"	"2.35"	"1.6"
##	[5748]	"2.99"	"3.7"	"3"	"3.3"	"3.15"	"3.5"	"2.42"
##	[5755]	"2.4"	"2.7"	"2.5"	"3.27"	"1.05"	"1.5"	"1.6"
##	[5762]	"1.63"	"1.92"	"2.15"	"3.4"	"2.4"	"2.5"	"3.22"
##	[5769]	"2.95"	"3"	"3.35"	"3.1"	"3.27"	"2.45"	"2.5"
##	[5776]	"3.35"	"3"	"3.4"	"1.82"	"1.85"	"2"	"1.7"
##	[5783]	"1.75"	"1.71"	"2.3"	"2.95"	"1.9"	"1.92"	"2.2"

##	[5790]	"2.45"	"2.25"	"2.15"	"2.15"	"2.75"	"2.4"	"2.15"
##	[5797]	"2.1"	"2.18"	"2.2"	"2.2"	"2.2"	"1.3"	"2.02"
##	[5804]	"1.59"	"1.3"	"1.35"	"1.2"	"1.18"	"2.5"	"2"
##	[5811]	"1.7"	"3.6"	"1.69"	"1"	"1.05"	"1.8"	"0.8"
##	[5818]	"0.85"	"1.2"	"1.3"	"1.95"	"1"	"1.95"	"1.9"
##	[5825]	"1.6"	"1.1"	"1.05"	"1.2"	"2.45"	"2.3"	"2.45"
##	[5832]	"2.1"	"2.49"	"1.75"	"1.2"	"1.4"	"1.5"	"1.8"
##	[5839]	"1.2"	"1.1"	"1.4"	"1.3"	"1.02"	"1.6"	"1.4"
##	[5846]	"1.9"	"2.05"	"2.15"	"1.4"	"1.2"	"1.5"	"1.6"
##	[5853]	"1.91"	"2.57"	"2.2"	"2.2"	"2.3"	"2.56"	"2"
##	[5860]	"1.95"	"2.55"	"2.03"	"1.88"	"1.7"	"1.7"	"1.8"
##	[5867]	"1.6"	"2.36"	"1.35"	"1.35"	"1.75"	"1.5"	"1.94"
##	[5874]	"3.1"	"3.1"	"4.15"	"3.82"	"4.99"	"2.17"	"2.3"
##	[5881]	"3.95"	"3.7"	"3.9"	"2.83"	"3.5"	"4.6"	"4.9"
##	[5888]	"5.3"	"4.33"	"4.51"	"5.2"	"6.1"	"4.85"	"4.57"
##	[5895]	"4.6"	"4.85"	"4.2"	"4.75"	"2.84"	"3.2"	"3.55"
##	[5902]	"3.56"	"3.87"	"1.97"	"1.95"	"3.5"	"2.8"	"4.1"
##	[5909]	"3.45"	"3.52"	"4.2"	"5"	"5"	"1.6"	"1.5"
##	[5916]	"1.95"	"1.78"	"2.42"	"1.8"	"1.9"	"2.25"	"3"
##	[5923]	"2.05"	"2.35"	"2.85"	"3.4"	"3.35"	"3.7"	"4.15"
##	[5930]	"4.35"	"5.1"	"3.2"	"3.95"	"1.3"	"1.4"	"1.9"
##	[5937]	"1.75"	"2.35"	"3.2"	"3.2"	"4"	"3.8"	"4.35"
##	[5944]	"2.12"	"2.8"	"3.4"	"3.8"	"4.35"	"1.6"	"1.45"
##	[5951]	"1.95"	"5.25"	"5.7"	"2.77"	"3.25"	"4.3"	"3.95"
##	[5958]	"4.75"	"1.8"	"1.95"	"2.7"	"2.65"	"2.87"	"2.56"
##	[5965]	"2.85"	"3.3"	"2.9"	"3.34"	"2.45"	"3.31"	"3.4"
##	[5972]	"3.6"	"3.9"	"2.93"	"2.75"	"4.25"	"3.8"	"4.77"
##	[5979]	"2.72"	"3.4"	"3.4"	"3.75"	"4.05"	"1.6"	"1.5"
##	[5986]	"1.7"	"1.5"	"1.82"	"1.3"	"1.4"	"1.7"	"1.75"
##	[5993]	"2.1"	"1.68"	"2.2"	"3.2"	"2.95"	"3.06"	"1.61"
##	[6000]	"1.95"	"2.55"	"3.6"	"2.48"	"1.45"	"2.2"	"2"
##	[6007]	"2.5"	"3.31"	"1.7"	"1.85"	"2.4"	"2.4"	"2.72"
##	[6014]	"1.2"	"1.55"	"2"	"2.2"	"2.38"	"1.89"	"2.21"
##	[6021]	"2.65"	"2.6"	"2.6"	"2.58"	"2.45"	"2.7"	"3"
##	[6028]	"2.89"	"1.63"	"1.9"	"1.95"	"2"	"2.35"	"1.35"
##	[6035]	"1.38"	"1.8"	"1.75"	"2.23"	"2.68"	"2.95"	"2.9"
##	[6042]	"2.65"	"2.57"	"1.74"	"1.9"	"2.05"	"2.25"	"2.3"
##	[6049]	"2.21"	"2.2"	"2.8"	"2.67"	"2.75"	"1.89"	"1.5"
##	[6056]	"2.8"	"2.3"	"2.8"	"1.45"	"1.95"	"1.6"	"1.5"
##	[6063]	"1.64"	"2.91"	"4.43"	"3.65"	"4.1"	"4.16"	"3.93"
##	[6070]	"3.22"	"4.29"	"4.15"	"4.7"	"3.96"	"4.25"	"4.5"
##	[6077]	"4.92"	"5.11"	"2.98"	"2.95"	"2.75"	"3.7"	"4.28"
##	[6084]	"4.12"	"3.75"	"4.25"	"4.05"	"4.56"	"2.13"	"2.2"
##	[6091]	"2.56"	"2.3"	"2.89"	"2.1"	"2.12"	"2.37"	"2.55"
##	[6098]	"3.44"	"3.61"	"4"	"4.27"	"4.23"	"4.6"	"2.57"
##	[6105]	"2.25"	"2.69"	"2.95"	"3.51"	"1.8"	"1.75"	"1.9"
##	[6112]	"2"	"2.49"	"2.54"	"2.15"	"2.43"	"2.5"	"2.87"
##	[6119]	"2.53"	"2.55"	"2.61"	"2.72"	"3.03"	"1.7"	"1.6"
##	[6126]	"1.8"	"1.6"	"2.05"	"1.65"	"1.5"	"1.8"	"1.62"
##	[6133]	"1.94"	"2.56"	"2.43"	"2.51"	"2.8"	"2.7"	"1.69"
##	[6140]	"1.8"	"1.8"	"1.85"	"2.22"	"1.72"	"1.4"	"1.55"
##	[6147]	NA	NA	"1"	"0.95"	"1"	"1.3"	"1.42"
##	[6154]	"1.5"	"1.3"	"1.05"	"0.7"	"1.17"	"1.6"	"1.5"
##	[6161]	"1.95"	"2.22"	"2.4"	"1.5"	"1.4"	"1.4"	"1.5"

##	[6168]	"1.67"	"1.82"	"1.6"	"1.2"	"1.25"	"1.4"	"1.3"
##	[6175]	"1.25"	"1.2"	NA	"MISSING"	"2.5"	"2.15"	"2.2"
##	[6182]	"2"	"2.15"	"1.84"	"1.85"	"2.05"	"2.1"	"2.15"
##	[6189]	"1.9"	"1.8"	"1.9"	"1.65"	"1.96"	"2.2"	"2"
##	[6196]	"2.4"	"2.2"	"2.34"	"1.45"	"1.35"	"1.6"	"1.62"
##	[6203]	"1.87"	"1.7"	"1.6"	"1.75"	"1.6"	"1.81"	"2.27"
##	[6210]	"2.34"	"2.35"	NA	NA	"1.69"	"1.55"	"1.65"
##	[6217]	"1.6"	"1.69"	"1.4"	"1.3"	"1.4"	"1.45"	"1.7"
##	[6224]	"1.96"	"2.15"	"2.24"	"2.5"	"2.77"	"3.67"	"3.8"
##	[6231]	"3.95"	"4.9"	"4.05"	"4.26"	"4.29"	"4.12"	"3.65"
##	[6238]	"4.56"	"3.57"	"3.01"	"3.42"	"3.62"	"4"	"3.2"
##	[6245]	"3.55"	"3.3"	NA	NA	"3.97"	"3.66"	"3.8"
##	[6252]	"3.35"	"4.34"	"2.61"	"2.72"	"2.9"	"3.07"	"3.21"
##	[6259]	"1.78"	"1.82"	"1.6"	"1.95"	"2.25"	"2.55"	"2.7"
##	[6266]	"2.75"	"2.36"	"2.74"	"1.7"	"1.6"	"1.5"	"1.62"
##	[6273]	"1.94"	"1.55"	NA	NA	"2.7"	"3.12"	"2.59"
##	[6280]	"2.1"	"2.94"	"2.65"	"2.19"	"2.16"	"2"	"2.78"
##	[6287]	"2.8"	"3.05"	"2.49"	"3.1"	"3.53"	"3.67"	"4.2"
##	[6294]	"2.47"	"2.5"	"3.26"	"3.25"	"3.08"	"2.92"	"3.2"
##	[6301]	"4"	"4.4"	"4.4"	"3.2"	"2.85"	"3.6"	"4.65"
##	[6308]	"4.52"	"1.6"	"1.6"	"2.82"	"3.65"	"3.85"	"1.83"
##	[6315]	"1.95"	"1.98"	"2"	"2.6"	"1.91"	"1.96"	"2.09"
##	[6322]	"1.8"	"2.4"	"1.7"	"2.31"	"2.4"	"3.5"	"2.75"
##	[6329]	"2.73"	"2.93"	"2.9"	"2.95"	"2.64"	"2.17"	"2.5"
##	[6336]	"2.7"	"2.73"	"3.05"	"1.6"	"1.7"	"1.99"	"2.1"
##	[6343]	"3.2"	"1.55"	"1.45"	"2"	"2"	"2.03"	"1.6"
##	[6350]	"1.39"	"1.75"	"1.81"	"2.05"	"1.5"	"2.65"	"4.9"
##	[6357]	"1.45"	"0.9"	"3.53"	"3.4"	"3.6"	"3.7"	"3.18"
##	[6364]	"1.84"	"2.15"	"2.12"	"2.25"	"2.68"	"2.48"	NA
##	[6371]	NA	NA	NA	"1.6"	"1.6"	"1.8"	"1.9"
##	[6378]	"2.64"	"1.45"	"1.65"	"1.9"	"2"	"2.28"	"1.86"
##	[6385]	"1.86"	"2.25"	"2.4"	"2.77"	"2.41"	"2.8"	NA
##	[6392]	NA	NA	"2.64"	"1.4"	"1.35"	"1.6"	"1.83"
##	[6399]	"3.53"	"3.43"	"2.83"	NA	NA	"1.63"	"1.7"
##	[6406]	"1.55"	"1.8"	"1.62"	"1.6"	"1.4"	"1.1"	"1.6"
##	[6413]	"1.26"	"2.56"	"2.2"	"2.2"	"1.9"	"2.29"	"2.27"
##	[6420]	"2"	"2.14"	"1.9"	"1.97"	"1.8"	"1.8"	"2.58"
##	[6427]	"2.3"	"2.12"	"2.19"	"2.15"	"3.53"	"2.2"	"2.26"
##	[6434]	"2.23"	"1.6"	"1.75"	"1.65"	"1.4"	"2.3"	"1.6"
##	[6441]	"2.78"	NA	NA	"2.11"	"2.2"	"2.3"	"2.4"
##	[6448]	"2.18"	"1.7"	"2.05"	"2.3"	"2.41"	"2.37"	"2.1"
##	[6455]	"1.95"	"2.57"	"3.75"	"2.82"	"2.38"	"2.75"	"3.7"
##	[6462]	"3.05"	"3.43"	"1.6"	"1.4"	"1.83"	"1.8"	"1.98"
##	[6469]	"2.44"	"2.59"	"2.71"	"2.67"	"2.7"	"1.69"	"1.7"
##	[6476]	"1.9"	"1.85"	"1.94"	"1.68"	"1.4"	"2.14"	"2"
##	[6483]	"2.44"	"1.4"	"1.3"	"1.7"	"1.65"	"1.74"	"2.56"
##	[6490]	"1.6"	"1.94"	"1.85"	NA	"3.1"	"3.04"	"3.2"
##	[6497]	"3.05"	"3.04"	"2.23"	"2.45"	"2.63"	"2.45"	"2.58"
##	[6504]	"2.69"	"2.95"	"3.2"	"3.25"	"3.69"	"2.44"	"2.35"
##	[6511]	"3.06"	"2.8"	"2.96"	"3.4"	"3.25"	"3.29"	"3.8"
##	[6518]	"3.75"	"4.12"	"4.75"	"4.79"	"4.9"	"4.39"	"4.25"
##	[6525]	"4.23"	"4.79"	"5.2"	"4.63"	"2.19"	"2.44"	"2.84"
##	[6532]	"3.1"	"3.31"	"2.63"	"3"	"3.15"	"3.39"	"3.52"
##	[6539]	"3.13"	"3.3"	"3.17"	"3.42"	"3.44"	"3"	"3.2"

##	[6546]	"3.63"	"5.1"	"3.76"	"2.79"	"3.05"	"3.05"	"3.47"
##	[6553]	"3.53"	"1.77"	"1.8"	"2"	"2.2"	"2.55"	"2.95"
##	[6560]	"3.1"	"3.37"	"3.15"	"3.85"	"3.69"	"3.89"	"4"
##	[6567]	"4.2"	"4.18"	"2.6"	"2.69"	"2.73"	"3"	"3.24"
##	[6574]	"2.13"	"2.23"	"2.44"	"2.75"	"2.9"	"1.5"	"1.5"
##	[6581]	"2.5"	NA	NA	"1.67"	"1.82"	"2.06"	"1.8"
##	[6588]	"1.95"	"1.55"	"1.45"	"2.16"	"2"	"2.15"	"1.71"
##	[6595]	"1.55"	"1.7"	"2.12"	"2.21"	"1.71"	"1.84"	"2.6"
##	[6602]	"2.25"	"2.47"	"1.65"	"1.35"	"1.65"	NA	NA
##	[6609]	"1.7"	"1.55"	"1.95"	"2"	"1.92"	"1.9"	"1.85"
##	[6616]	"2.4"	"1.79"	"1.8"	"1.63"	"1.75"	"1.8"	"1.85"
##	[6623]	"1.92"	"1.73"	"1.9"	"2.6"	"2.5"	"2.43"	"1.85"
##	[6630]	"1.9"	"2.35"	"2.15"	"2.31"	"1.7"	"2.3"	"1.97"
##	[6637]	"1.9"	"2.05"	"1.55"	"1.4"	"1.5"	"1.5"	"MISSING"
##	[6644]	"2.3"	"2.6"	"2.5"	NA	NA	"1.65"	"1.6"
##	[6651]	"1.8"	"1.81"	"1.95"	"1.6"	"1.5"	"1.6"	"1.58"
##	[6658]	"1.96"	"1.9"	"2.1"	"1.5"	NA	NA	"1.74"
##	[6665]	"1.8"	"1.7"	NA	NA	"1.75"	"1.9"	"1.4"
##	[6672]	"1.72"	"2.06"	"1"	"1"	"1"	NA	NA
##	[6679]	"2.84"	"2.75"	"3"	"3.05"	"3.1"	"2.79"	"2.7"
##	[6686]	"3.1"	"3.45"	"3.17"	"2.23"	"2.15"	"2.2"	"2.15"
##	[6693]	"2.13"	"2.76"	"2.8"	"3.2"	"3.1"	"3.65"	"1.68"
##	[6700]	"1.75"	"1.7"	"1.7"	"1.8"	"3.25"	"3.45"	"3.85"
##	[6707]	"3.8"	"4.4"	"2.92"	"3"	"3.5"	"3.6"	"4.03"
##	[6714]	"2.93"	"3.1"	"3.5"	"3.7"	"3.58"	"1.7"	"1.55"
##	[6721]	"1.9"	"2.1"	"2.45"	"2.29"	"2.55"	"2.4"	"2.1"
##	[6728]	"2.76"	"2.4"	"2.15"	"1.9"	"1.95"	"2.25"	"1.97"
##	[6735]	"2.05"	"2"	"1.9"	"2.08"	"2.17"	"2.25"	"2.3"
##	[6742]	"2"	"2.05"	"2.63"	"2.9"	"2.75"	"2.6"	"2.51"
##	[6749]	"3.18"	"3.84"	"3.45"	"3.4"	"3.69"	"1.35"	"1.2"
##	[6756]	"1.6"	"4.37"	"2.35"	"2.3"	"2.33"	"2.9"	"3.45"
##	[6763]	"3.82"	"2.22"	"2.51"	"2.55"	"2.85"	"3.45"	"2.57"
##	[6770]	"2.1"	"2.3"	"2.5"	"2.75"	"2.35"	"2.66"	"2.9"
##	[6777]	"3.05"	"3.95"	"1.9"	"1.9"	"1.85"	"1.95"	"2.58"
##	[6784]	"1.97"	"1.53"	"2.6"	"4"	"4.2"	"2"	"1.25"
##	[6791]	"2.1"	"2.1"	"2.42"	"1.74"	"1.82"	"2.64"	"2.95"
##	[6798]	"3.2"	"1.45"	"1.55"	"1.8"	"1.85"	"2"	"3.3"
##	[6805]	"2.6"	"3.2"	"4.1"	"4.15"	"2.04"	"2.1"	"2.1"
##	[6812]	"2.42"	"3.35"	"1.6"	"2"	"2.15"	"2.6"	"2.99"
##	[6819]	"1.4"	"1.4"	"1.75"	"1.65"	"4.13"	"1.64"	"2"
##	[6826]	"2.5"	"3"	"3.09"	"1.99"	"1.9"	"1.95"	"2.1"
##	[6833]	"2.2"	"2.54"	"2.2"	"2.65"	"2.9"	"2.81"	"1.55"
##	[6840]	"1.55"	"1.75"	"1.86"	"2.25"	"1.9"	"1.9"	"2"
##	[6847]	"1.95"	"2.08"	"1.96"	"2"	"1.95"	"2.1"	"2.44"
##	[6854]	"1.42"	"1.35"	"1.6"	"1.9"	"1.97"	"2.45"	"2.55"
##	[6861]	"2.7"	"2.6"	"2.59"	"1.82"	"1.8"	"2.2"	"2.26"
##	[6868]	"2.39"	"1.8"	"1.75"	"1.6"	"1.6"	"2.01"	"1.6"
##	[6875]	"1.4"	"1.05"	"1.65"	"1.83"	"3.39"	"3.64"	"4.1"
##	[6882]	"4"	"3.94"	"2.4"	"2.6"	"3"	"3"	"3.39"
##	[6889]	"4.57"	"4.95"	"4.9"	"4.6"	"5.3"	"2.55"	"3.03"
##	[6896]	"3.09"	"3.4"	"3.67"	"4.43"	"4.51"	"4.6"	"2.45"
##	[6903]	"2.41"	"2.45"	"2.8"	"2.89"	"3.16"	"3.25"	"3.75"
##	[6910]	"3.8"	"3.95"	"3.55"	"4.03"	"3.61"	"3.6"	"4.22"
##	[6917]	"4.21"	"4.35"	"4.2"	"1.45"	"1.75"	"1.65"	"1.92"

## [6924]	"1.95"	"2.67"	"2.68"	"2.83"	"3"	"3.18"	"1.88"
## [6931]	"1.95"	"1.95"	"2.2"	"2.05"	"2.65"	"2.8"	"3"
## [6938]	"3.2"	"3.14"	"2.34"	"2.2"	"2.53"	"2.61"	"2.24"
## [6945]	"2.25"	"2.16"	"2.7"	"3.28"	"2.85"	"3.29"	"3.5"
## [6952]	"3.47"	"2.79"	"2.8"	"3.32"	"3.6"	"2.5"	"2.4"
## [6959]	"2.63"	"3"	"2.1"	"2.2"	"2.25"	"2.7"	"3.9"
## [6966]	"3.8"	"3.77"	"4.05"	"4.7"	"1.96"	"2.1"	"2.4"
## [6973]	"2.7"	"1.6"	"1.6"	"1.7"	"1.8"	"2"	"2"
## [6980]	"1.85"	"2.3"	"1.55"	"2.1"	"1.9"	NA	"1.4"
## [6987]	"2.2"	"2.49"	NA	"2.26"	"2.15"	"3.25"	NA
## [6994]	"2.4"	"2"	"2.33"	"2.55"	"1.7"	"1.85"	"3.3"
## [7001]	"3.4"	"2.28"	"1.95"	"2.42"	"2.1"	"1.99"	"1.8"
## [7008]	"2.48"	"2.65"	"1.91"	"1.75"	"2.73"	"2.95"	"1.89"
## [7015]	"1.7"	"2.89"	"2.1"	"1.79"	"1.75"	"2.2"	"2.6"
## [7022]	"1.7"	"1.55"	"1.85"	"2.6"	"1.9"	"1.6"	"1.5"
## [7029]	"1.45"	"1.5"	"1.57"	"2.78"	"2.8"	"0.8"	"2.6"
## [7036]	"2.6"	"1.7"	"1.7"	"1.78"	"2.05"	"2"	"1.6"
## [7043]	"1.6"	"1.52"	NA	NA	"2.17"	"2.3"	"2.13"
## [7050]	"2.3"	"2.15"	"1.45"	"1.35"	"1.3"	"0.8"	"0.9"
## [7057]	"2.1"	"2.4"	"2.1"	"2.15"	"2.13"	"1.57"	"1.85"
## [7064]	"1.7"	"2.05"	"2.1"	"2.57"	"2.15"	"2.04"	"1.9"
## [7071]	"1.95"	"3.1"	"3.05"	"3.57"	"4"	"4.75"	"1.55"
## [7078]	"1.7"	"1.7"	"1.6"	"2"	"1.9"	"1.92"	"2.07"
## [7085]	"1.82"	"1.95"	"3"	"3.1"	"3.24"	"3.1"	"3.28"
## [7092]	"3.38"	"3.55"	"3.63"	"3.7"	"3.39"	"2.69"	"2.7"
## [7099]	"3.05"	"3"	"3.6"	"1.65"	"1.85"	"1.88"	"2"
## [7106]	"2.28"	"3.55"	"3.55"	"4.04"	"3.7"	"4.09"	"2.31"
## [7113]	"2.25"	"2.57"	"1.8"	"3.17"	"3.28"	"3.3"	"3.92"
## [7120]	"4"	"4.37"	"1.79"	"1.8"	"1.8"	NA	NA
## [7127]	"2.68"	"2.9"	"2.7"	"2.8"	"2.8"	"2.79"	"3.37"
## [7134]	"3.29"	"2.9"	"3.13"	"1.99"	"2.09"	"2.26"	"2.1"
## [7141]	"2.23"	"1.86"	"2.1"	"1.95"	"1.8"	"1.67"	"2.13"
## [7148]	"2.24"	"2.66"	"2.6"	"3.32"	"1.75"	"1.85"	"2.05"
## [7155]	"2.1"	"2.47"	"1.92"	"2.15"	"2.12"	"2"	"1.72"
## [7162]	"2.63"	"2.79"	"2.83"	"2.7"	"3"	"2.17"	"2.39"
## [7169]	"2.65"	"3"	"3.45"	"1.75"	"1.7"	"1.5"	"1.75"
## [7176]	"1.6"	"1.3"	"1.85"	"1.95"	"1.8"	"1.6"	"1.98"
## [7183]	"1.8"	"2.08"	"2.2"	"1.67"	"1.99"	"1.7"	"1.95"
## [7190]	"2"	"1.87"	"1.63"	"1.6"	"1.45"	"1.2"	"1.06"
## [7197]	"1.85"	"1.85"	"1.85"	"1.62"	"1.68"	"2.48"	"1.75"
## [7204]	"1.89"	"2"	"1.82"	"1.29"	"1.3"	"1.4"	"0.7"
## [7211]	"1.58"	"1.5"	"1.25"	"1.4"	NA	NA	"1.65"
## [7218]	"1.6"	"1.52"	"2.4"	"1.35"	"1.54"	"1.2"	"1.4"
## [7225]	"1.75"	NA	"1.38"	"1.1"	"1.9"	"1.8"	"1.85"
## [7232]	"2.44"	"1.6"	"1.6"	"1.6"	"1.7"	"1.76"	"1.45"
## [7239]	"2.45"	"1.6"	"1.78"	"1.25"	"0.76"	"1.6"	"1.8"
## [7246]	"2.2"	"1.4"	"1.3"	NA	"1.5"	"1.82"	"1.93"
## [7253]	"1.9"	"1.93"	"1.8"	"2.25"	"2.21"	"2.3"	"2.21"
## [7260]	"2.4"	"2.23"	"1.85"	"1.5"	"1.9"	"1.9"	"2.33"
## [7267]	"1.65"	"1.55"	NA	"2"	"2.05"	"2.7"	"2.65"
## [7274]	"3"	"2.78"	"3.05"	"2.4"	"2.5"	"2.8"	"2.95"
## [7281]	"3.05"	"3.57"	"3.45"	"4.1"	"3.8"	"3.82"	"3.47"
## [7288]	"3.55"	"4.2"	"3.7"	"4.09"	"2.41"	"2.25"	"2.75"
## [7295]	"3.7"	"3.47"	"2.83"	"2.7"	"2.65"	"2.8"	"2.87"

```
## [7302] "1.7"      "1.75"     "1.9"      "2"        "2.82"     "2.38"     "2.32"
## [7309] "2.65"     "3.1"      "2.64"     "2.58"     "2.62"     "2.8"      "2.75"
## [7316] "2.69"     "2.37"     "2.5"      "2.6"      "2.5"      "2.84"     "2.9"
## [7323] "3.3"      "3.85"     "4.1"      "4.17"     "3.35"     "3.4"      "3.5"
## [7330] "5.23"     "3.15"     "3.2"      "2.5"      "2.9"      "3.6"      "3.35"
## [7337] "2.2"      "2.15"     "2.1"      "2.7"      "2.92"     "3.52"     "3.85"
## [7344] "4"        "3.8"      "4.01"     "2.9"      "3"        "3.65"     "3.5"
## [7351] "4.28"     "3.92"     "3.5"      "4.2"      "4.15"     "5.1"      "2.91"
## [7358] "3.3"      "4.1"      "4.8"      "4.49"     "3.45"     "3.7"      "3.7"
## [7365] "3.25"     "3.56"     "2"        "2.01"     "2.2"      "2.35"     "2.84"
## [7372] "2.1"      "2.1"      "2.95"     "3.51"     "3.68"     "1.58"     "1.62"
## [7379] "1.6"      "1.62"     "1.76"     "1.7"      "1.75"     "2.1"      "2.62"
## [7386] "2.71"     "2.02"     "2.55"     "2.5"      "2.65"     "2.61"     "1.7"
## [7393] "1.94"     "2.35"     "2.27"     "2.26"     "1.3"      "2.15"     "1.95"
## [7400] "1.7"      "1.9"      "2"        "2.4"      "1.75"     "2.5"      "2.1"
## [7407] "1.8"      "1.2"      "2.25"     "2.39"     "3.18"     "1.4"      "1.85"
## [7414] "1.4"      NA         NA         "1.9"      "1.9"      "2.2"      "2.6"
## [7421] "2.77"     "1.5"      "1.45"     "1.45"     "1.62"     "1.75"     "1.75"
## [7428] "1.85"     "2"        "2.15"     "2.2"      "1.76"     "1.85"     "2"
## [7435] "2.05"     "2.06"     "1.45"     "1.4"      "1.45"     "1.7"      "1.78"
## [7442] "1.8"      "1.95"     "1.9"      "1.8"      "1.96"     "1.99"     "2.11"
## [7449] "2"        NA         NA         "2.82"     "3.1"      "3"        "3.1"
## [7456] "2.86"     "1.6"      "1.6"      "1.6"      "1.72"     "1.93"     "1.6"
## [7463] "1.6"      "1.6"      "1.7"      "2.1"      "1.81"     "1.92"     "1.85"
## [7470] "2.15"     "2.33"     "3.23"     "3.74"     "3.81"     "4"        "3.91"
## [7477] "2.9"      "3.15"     "3.85"     "3.35"     "3.88"     "1.89"     "2.49"
## [7484] "2.65"     "2.56"     "3.06"     "2.65"     "2.45"     "3.65"     "3.35"
## [7491] "4.3"      "3"        "2.12"     "2.98"     NA         NA         "2.54"
## [7498] "1.88"     "2.3"      "2"        "3.5"      "3.15"     "2"        "3.4"
## [7505] "2.6"      "2.69"     NA         "4.36"
```

```
trees$HEIGHT <- as.numeric(trees$HEIGHT)
```

```
## Warning: NAs introduced by coercion
```

```
head(trees)
```

```
## # A tibble: 6 x 16
##   SURVEY YEAR SITE TREATMENT BLOCK PLOT SPECIES ORIGI~1 NEW_TAG DEAD HEIGHT
##   <dbl> <dbl> <chr> <chr>      <dbl> <chr> <chr>      <dbl> <dbl> <chr> <dbl>
## 1     1   2009 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N      3.4
## 2     2   2010 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N      3.32
## 3     3   2011 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N      3.65
## 4     4   2012 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N      3.74
## 5     5   2013 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N      3.59
## 6     1   2009 SOUTH TOTAL          2 S2TOT~ Acacia~      2     NA N      2.3
## # ... with 5 more variables: AXIS_1 <dbl>, AXIS_2 <chr>, CIRC <dbl>,
## # MEASUREMENT <chr>, STEMS <chr>, and abbreviated variable name
## # 1: ORIGINAL_TAG
```

\$Alternative Way

```
trees <- read_tsv("../data raw/TREE_SURVEYS.txt",
  col_types = list(HEIGHT = col_double(),
    AXIS_2 = col_double()))
```

```
## Warning: One or more parsing issues, see 'problems()' for details
```

```
trees$canopy_area <- trees$AXIS_1 * trees$AXIS_2
head(trees)
```

```
## # A tibble: 6 x 17
##   SURVEY YEAR SITE TREATMENT BLOCK PLOT SPECIES ORIGI~1 NEW_TAG DEAD HEIGHT
##   <dbl> <dbl> <chr> <chr>      <dbl> <chr> <chr>      <dbl> <dbl> <chr> <dbl>
## 1     1     2009 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N     3.4
## 2     2     2010 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N     3.32
## 3     3     2011 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N     3.65
## 4     4     2012 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N     3.74
## 5     5     2013 SOUTH TOTAL          2 S2TOT~ Acacia~      1     NA N     3.59
## 6     1     2009 SOUTH TOTAL          2 S2TOT~ Acacia~      2     NA N     2.3
## # ... with 6 more variables: AXIS_1 <dbl>, AXIS_2 <dbl>, CIRC <dbl>,
## # MEASUREMENT <chr>, STEMS <chr>, canopy_area <dbl>, and abbreviated variable
## # name 1: ORIGINAL_TAG
```

```
numbers <- 1:10
numbers[c(1:3, 5:10)]
```

```
## [1] 1 2 3 5 6 7 8 9 10
```

```
numbers[-4]
```

```
## [1] 1 2 3 5 6 7 8 9 10
```

```
trees [1:3,-(5:10)]
```

```
## # A tibble: 3 x 11
##   SURVEY YEAR SITE TREATMENT HEIGHT AXIS_1 AXIS_2 CIRC MEASUR~1 STEMS canop~2
##   <dbl> <dbl> <chr> <chr>      <dbl> <dbl> <dbl> <dbl> <chr> <chr> <dbl>
## 1     1     2009 SOUTH TOTAL          3.4  6.1    5    37.8 D      1    30.5
## 2     2     2010 SOUTH TOTAL          3.32  8.25  8.45  18.8 D      1    69.7
## 3     3     2011 SOUTH TOTAL          3.65  8.85  9     57    C      1    79.6
## # ... with abbreviated variable names 1: MEASUREMENT, 2: canopy_area
```

```
subset(trees, select = c (SURVEY, YEAR, SITE, canopy_area))
```

```
## # A tibble: 7,508 x 4
##   SURVEY YEAR SITE canopy_area
##   <dbl> <dbl> <chr> <dbl>
## 1     1     2009 SOUTH    30.5
## 2     2     2010 SOUTH    69.7
## 3     3     2011 SOUTH    79.6
```

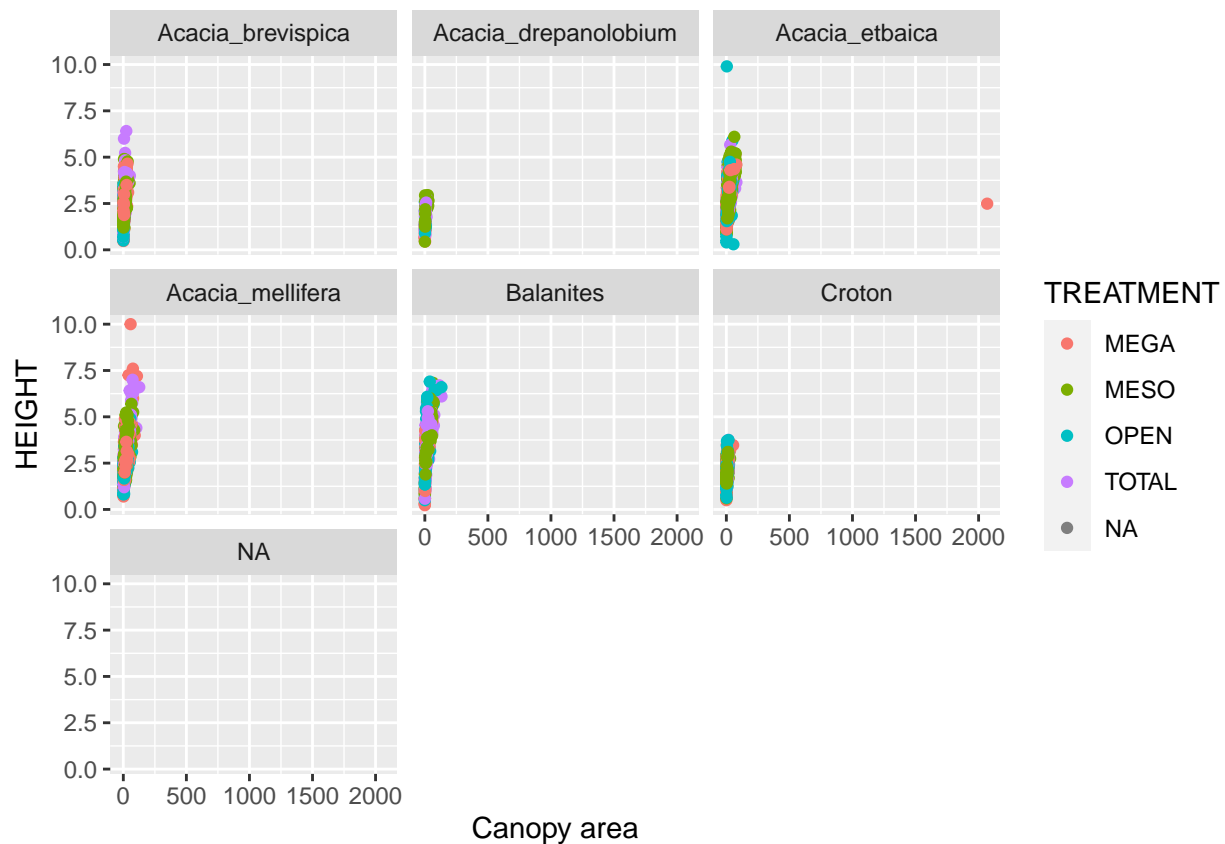


```
## 4      4  2012 SOUTH      39.0
## 5      5  2013 SOUTH      40.8
## 6      1  2009 SOUTH       6.16
## 7      2  2010 SOUTH       7.29
## 8      3  2011 SOUTH      12.5
## 9      4  2012 SOUTH      NA
## 10     5  2013 SOUTH       9.62
## # ... with 7,498 more rows
```

```
trees2 <- trees[,c("SURVEY", "YEAR", "SITE", "canopy_area")]
```

```
ggplot(data = trees, mapping = aes(x = canopy_area, y = HEIGHT, color = TREATMENT)) + geom_point() +
  labs(x = "Canopy area") +
  facet_wrap(~SPECIES)
```

```
## Warning: Removed 215 rows containing missing values ('geom_point()').
```



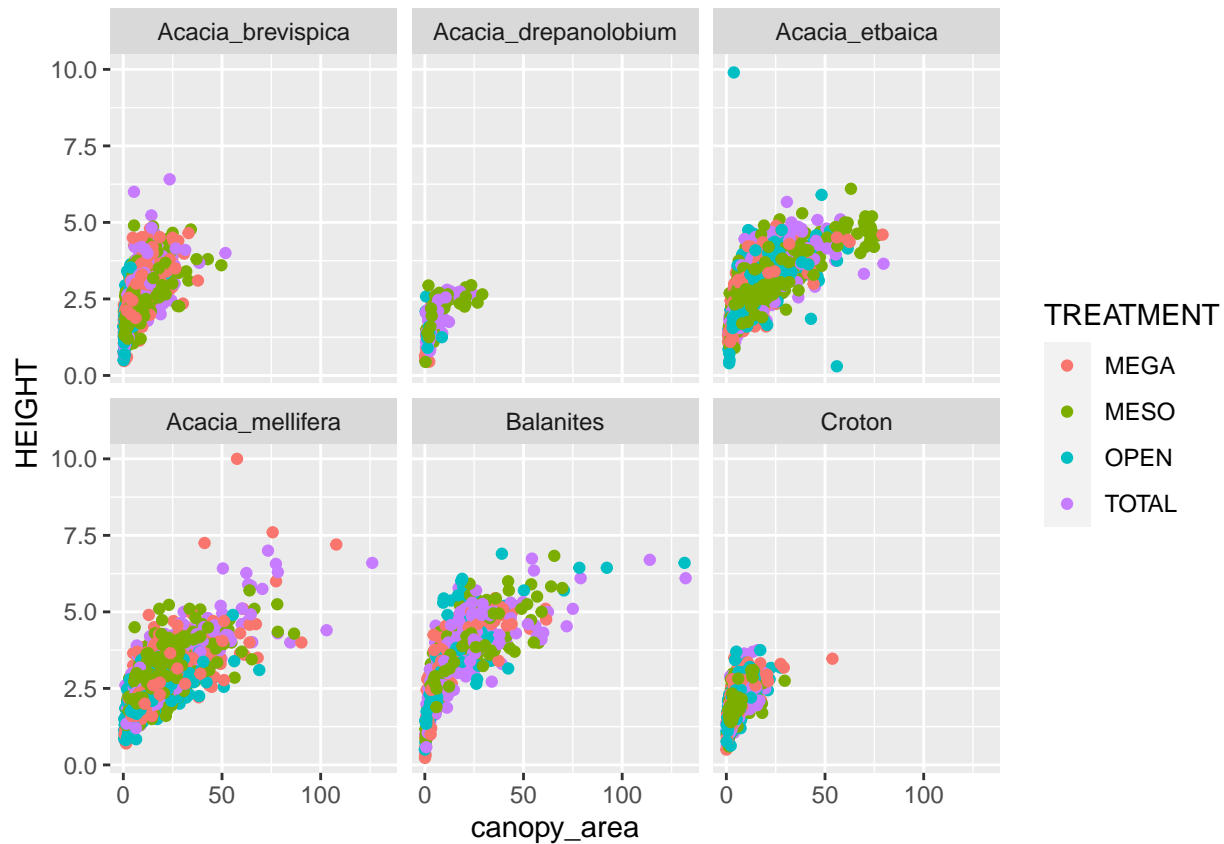
```
#or we can do this with teh subset function
trees3 <- subset(trees, canopy_area <=400)
# or finding the actual value that is the outlier
which(trees$canopy_area > 2000)
```

```
## [1] 3839
```

```
trees4 <- trees[-3839,]
```

```
trees3 <- subset(trees, canopy_area <= 400)
```

```
ggplot(data = trees3, mapping = aes(x = canopy_area, y = HEIGHT, color = TREATMENT)) + geom_point() + fa
```



Exercise 4

```
ggplot() +
  geom_point(data = trees,
    mapping = aes(x = CIRC , y = HEIGHT), color = "gray") + geom_smooth(data = trees,
    mapping = aes(x = CIRC , y = HEIGHT), color = "gray") + geom_point(data = acacia,
    mapping = aes(x = CIRC , y = HEIGHT ), color = "red") + geom_smooth(data = acacia,
    mapping = aes(x = CIRC , y = HEIGHT ), color = "red") + scale_x_log10() + scale_y_log10() + geom_smooth()
```

```
## 'geom_smooth()' using method = 'gam' and formula = 'y ~ s(x, bs = "cs")'
```

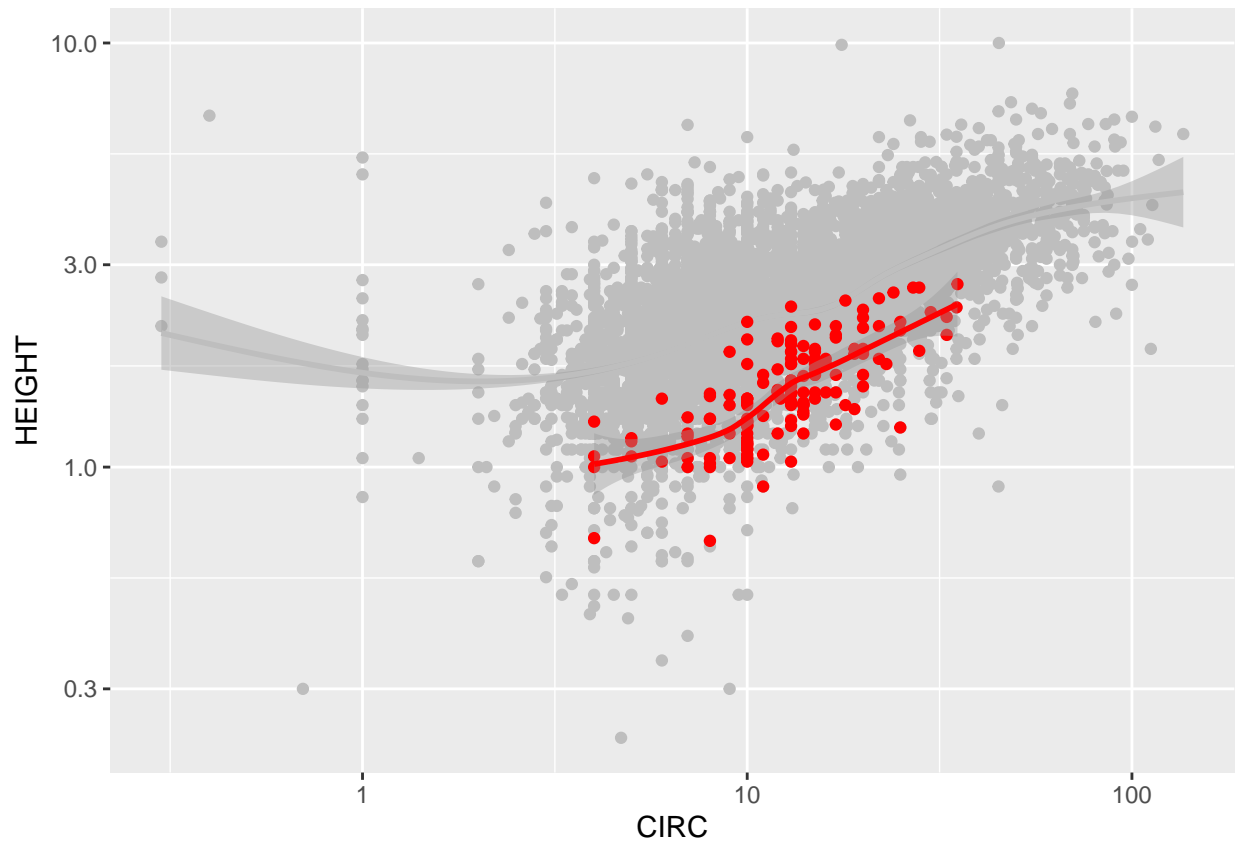
```
## Warning: Removed 414 rows containing non-finite values ('stat_smooth()').
```

```
## 'geom_smooth()' using method = 'loess' and formula = 'y ~ x'
```

```
## Warning: Removed 4 rows containing non-finite values ('stat_smooth()').
```

```
## Warning: Removed 414 rows containing missing values ('geom_point()').
```

```
## Warning: Removed 4 rows containing missing values ('geom_point()').
```



```
labs(x = "Circumference (cm)", y = "Height (m)", title = "Circumference to the Height Relationship of Acacia")
```

```
## $x
## [1] "Circumference (cm)"
##
## $y
## [1] "Height (m)"
##
## $title
## [1] "Circumference to the Height Relationship of Acacia"
##
## attr("class")
## [1] "labels"
```

Exercise 4 - Making the scatterplot in class

```
acacia <- read.csv(file = "../data raw/ACACIA_DREPANOLOBIUM_SURVEY.txt",
  sep = "\t",
  na.strings = "dead")
is.numeric(acacia$HEIGHT)
```

```
## [1] TRUE
```

```
trees <- read_tsv("../data raw/TREE_SURVEYS.txt",  
  col_types = list(HEIGHT = col_double(),  
    AXIS_2 = col_double()))
```

```
## Warning: One or more parsing issues, see 'problems()' for details
```

Visual Quality assurance and control with the function str()

```
str(acacia)
```

```
## 'data.frame': 157 obs. of 15 variables:  
## $ SURVEY : int 1 1 1 1 1 1 1 1 1 1 ...  
## $ YEAR : int 2012 2012 2012 2012 2012 2012 2012 2012 2012 2012 ...  
## $ SITE : chr "SOUTH" "SOUTH" "SOUTH" "SOUTH" ...  
## $ BLOCK : int 1 1 1 1 1 1 1 1 1 1 ...  
## $ TREATMENT: chr "TOTAL" "TOTAL" "TOTAL" "TOTAL" ...  
## $ PLOT : chr "S1TOTAL" "S1TOTAL" "S1TOTAL" "S1TOTAL" ...  
## $ ID : int 581 582 3111 3112 3113 3114 3115 3199 941 942 ...  
## $ HEIGHT : num 2.25 2.65 1.5 2.01 1.75 1.65 1.2 1.45 1.87 2.38 ...  
## $ AXIS1 : num 2.75 4.1 1.7 1.8 1.84 1.62 1.95 2 2.15 5.55 ...  
## $ AXIS2 : num 2.15 3.9 0.85 1.6 1.42 0.85 0.9 1.75 1.82 4.82 ...  
## $ CIRC : num 20 28 17 12 13 15 9 12.2 13 35 ...  
## $ FLOWERS : int 0 0 2 0 0 0 0 0 0 0 ...  
## $ BUDS : int 0 0 1 0 0 0 0 0 0 0 ...  
## $ FRUITS : int 10 150 50 75 20 0 0 25 0 50 ...  
## $ ANT : chr "CS" "TP" "TP" "CS" ...
```

```
is.numeric(acacia$CIRC)
```

```
## [1] TRUE
```

```
is.numeric(acacia$HEIGHT)
```

```
## [1] TRUE
```

```
str(trees)
```

```
## spc_tbl_ [7,508 x 16] (S3: spec_tbl_df/tbl_df/tbl/data.frame)  
## $ SURVEY : num [1:7508] 1 2 3 4 5 1 2 3 4 5 ...  
## $ YEAR : num [1:7508] 2009 2010 2011 2012 2013 ...  
## $ SITE : chr [1:7508] "SOUTH" "SOUTH" "SOUTH" "SOUTH" ...  
## $ TREATMENT : chr [1:7508] "TOTAL" "TOTAL" "TOTAL" "TOTAL" ...  
## $ BLOCK : num [1:7508] 2 2 2 2 2 2 2 2 2 2 ...  
## $ PLOT : chr [1:7508] "S2TOTAL" "S2TOTAL" "S2TOTAL" "S2TOTAL" ...  
## $ SPECIES : chr [1:7508] "Acacia_etbaica" "Acacia_etbaica" "Acacia_etbaica" "Acacia_etbaica" ..  
## $ ORIGINAL_TAG: num [1:7508] 1 1 1 1 1 2 2 2 2 2 ...  
## $ NEW_TAG : num [1:7508] NA NA NA NA NA NA NA NA NA ...  
## $ DEAD : chr [1:7508] "N" "N" "N" "N" ...
```

```
## $ HEIGHT      : num [1:7508] 3.4 3.32 3.65 3.74 3.59 2.3 2.32 2.75 NA 2.86 ...
## $ AXIS_1      : num [1:7508] 6.1 8.25 8.85 5.5 5 2.2 2.75 3.3 NA 3.7 ...
## $ AXIS_2      : num [1:7508] 5 8.45 9 7.1 8.15 2.8 2.65 3.8 NA 2.6 ...
## $ CIRC        : num [1:7508] 37.8 18.8 57 60 55 14.2 18.4 25 NA 31 ...
## $ MEASUREMENT : chr [1:7508] "D" "D" "C" "C" ...
## $ STEMS       : chr [1:7508] "1" "1" "1" "1" ...
## - attr(*, "spec")=
## .. cols(
## .. SURVEY = col_double(),
## .. YEAR = col_double(),
## .. SITE = col_character(),
## .. TREATMENT = col_character(),
## .. BLOCK = col_double(),
## .. PLOT = col_character(),
## .. SPECIES = col_character(),
## .. ORIGINAL_TAG = col_double(),
## .. NEW_TAG = col_double(),
## .. DEAD = col_character(),
## .. HEIGHT = col_double(),
## .. AXIS_1 = col_double(),
## .. AXIS_2 = col_double(),
## .. CIRC = col_double(),
## .. MEASUREMENT = col_character(),
## .. STEMS = col_character()
## .. )
## - attr(*, "problems")=<externalptr>
```

```
is.numeric(trees$CIRC)
```

```
## [1] TRUE
```

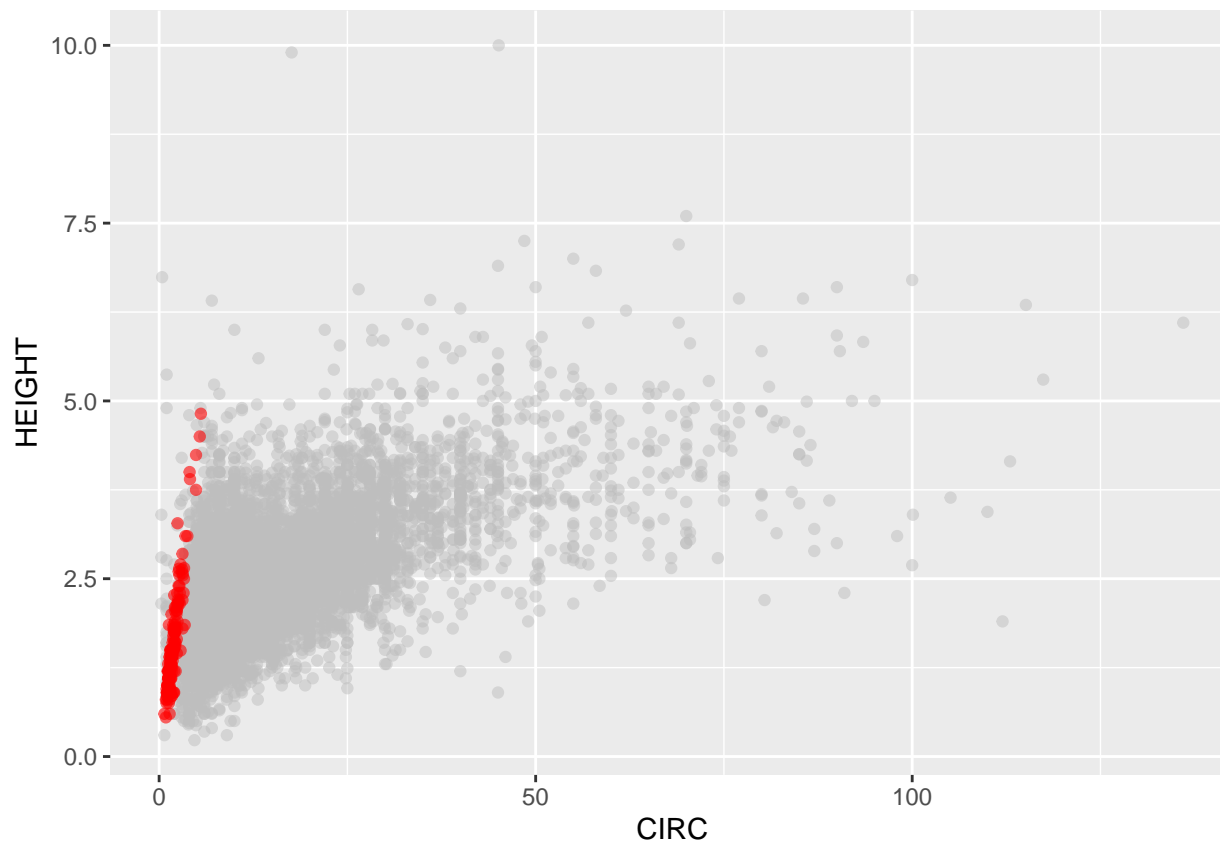
```
is.numeric(trees$HEIGHT)
```

```
## [1] TRUE
```

```
ggplot() +
  geom_point(data = trees, mapping = aes(x= CIRC, y= HEIGHT), color = "gray", alpha = 0.5) +
  geom_point(data = acacia, mapping =aes (x = AXIS1, y=AXIS2), color = "red", alpha = 0.6)
```

```
## Warning: Removed 414 rows containing missing values ('geom_point()').
```

```
## Warning: Removed 4 rows containing missing values ('geom_point()').
```



```
ggplot(data = trees, mapping = aes(x= CIRC, y= HEIGHT), color = "gray", alpha = 0.5) +
  geom_point( color = "gray") +
  geom_point(data = acacia, mapping =aes (x = CIRC, y=HEIGHT), color = "red", alpha = 0.6) +
  scale_x_log10() +
  scale_y_log10() +
  geom_smooth(method = "lm") +
  geom_smooth(data = acacia, mapping = aes(x= CIRC, y= HEIGHT), method = "lm")
```

```
## 'geom_smooth()' using formula = 'y ~ x'
```

```
## Warning: Removed 414 rows containing non-finite values ('stat_smooth()').
```

```
## 'geom_smooth()' using formula = 'y ~ x'
```

```
## Warning: Removed 4 rows containing non-finite values ('stat_smooth()').
```

```
## Warning: Removed 414 rows containing missing values ('geom_point()').
```

```
## Warning: Removed 4 rows containing missing values ('geom_point()').
```

