Assignment_2

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2021 10 2

Assignment 2

This is the **assignment 2** for R programming class and includes the following items;

1. Make a data frame from the air quality dataset

2. In the same chunk clean the dataset from NA values

3. Knit the RMarkdown file and make a PDF file

4. Save your RMarkdown and PDF files and commit them

5. Push the RMarkdown and PDF files to the repository

6. Check your GitHub and your repository

7. Submit the link of your public repository to the i-class assignment 2

Assignment 2-1

```
x <- data.frame(airquality)
x
```

```
##      Ozone Solar.R Wind Temp Month Day
## 1      41     190  7.4   67     5   1
## 2      36     118  8.0   72     5   2
## 3      12     149 12.6   74     5   3
## 4      18     313 11.5   62     5   4
## 5      NA      NA 14.3   56     5   5
## 6      28      NA 14.9   66     5   6
## 7      23     299  8.6   65     5   7
## 8      19      99 13.8   59     5   8
## 9       8      19 20.1   61     5   9
## 10     NA     194  8.6   69     5  10
## 11      7      NA  6.9   74     5  11
## 12     16     256  9.7   69     5  12
## 13     11     290  9.2   66     5  13
## 14     14     274 10.9   68     5  14
## 15     18      65 13.2   58     5  15
## 16     14     334 11.5   64     5  16
## 17     34     307 12.0   66     5  17
## 18      6      78 18.4   57     5  18
## 19     30     322 11.5   68     5  19
```

```
## 20      11      44   9.7    62      5   20
## 21       1       8   9.7    59      5   21
## 22      11     320  16.6    73      5   22
## 23       4      25   9.7    61      5   23
## 24      32      92  12.0    61      5   24
## 25      NA      66  16.6    57      5   25
## 26      NA     266  14.9    58      5   26
## 27      NA      NA   8.0    57      5   27
## 28      23      13  12.0    67      5   28
## 29      45     252  14.9    81      5   29
## 30     115     223   5.7    79      5   30
## 31      37     279   7.4    76      5   31
## 32      NA     286   8.6    78      6    1
## 33      NA     287   9.7    74      6    2
## 34      NA     242  16.1    67      6    3
## 35      NA     186   9.2    84      6    4
## 36      NA     220   8.6    85      6    5
## 37      NA     264  14.3    79      6    6
## 38      29     127   9.7    82      6    7
## 39      NA     273   6.9    87      6    8
## 40      71     291  13.8    90      6    9
## 41      39     323  11.5    87      6   10
## 42      NA     259  10.9    93      6   11
## 43      NA     250   9.2    92      6   12
## 44      23     148   8.0    82      6   13
## 45      NA     332  13.8    80      6   14
## 46      NA     322  11.5    79      6   15
## 47      21     191  14.9    77      6   16
## 48      37     284  20.7    72      6   17
## 49      20      37   9.2    65      6   18
## 50      12     120  11.5    73      6   19
## 51      13     137  10.3    76      6   20
## 52      NA     150   6.3    77      6   21
## 53      NA      59   1.7    76      6   22
## 54      NA      91   4.6    76      6   23
## 55      NA     250   6.3    76      6   24
## 56      NA     135   8.0    75      6   25
## 57      NA     127   8.0    78      6   26
## 58      NA      47  10.3    73      6   27
## 59      NA      98  11.5    80      6   28
## 60      NA      31  14.9    77      6   29
## 61      NA     138   8.0    83      6   30
## 62     135     269   4.1    84      7    1
## 63      49     248   9.2    85      7    2
## 64      32     236   9.2    81      7    3
## 65      NA     101  10.9    84      7    4
## 66      64     175   4.6    83      7    5
## 67      40     314  10.9    83      7    6
## 68      77     276   5.1    88      7    7
```

```
## 69      97      267  6.3    92      7    8
## 70      97      272  5.7    92      7    9
## 71      85      175  7.4    89      7   10
## 72      NA      139  8.6    82      7   11
## 73      10      264 14.3    73      7   12
## 74      27      175 14.9    81      7   13
## 75      NA      291 14.9    91      7   14
## 76       7       48 14.3    80      7   15
## 77      48      260  6.9    81      7   16
## 78      35      274 10.3    82      7   17
## 79      61      285  6.3    84      7   18
## 80      79      187  5.1    87      7   19
## 81      63      220 11.5    85      7   20
## 82      16        7  6.9    74      7   21
## 83      NA      258  9.7    81      7   22
## 84      NA      295 11.5    82      7   23
## 85      80      294  8.6    86      7   24
## 86     108      223  8.0    85      7   25
## 87      20       81  8.6    82      7   26
## 88      52       82 12.0    86      7   27
## 89      82      213  7.4    88      7   28
## 90      50      275  7.4    86      7   29
## 91      64      253  7.4    83      7   30
## 92      59      254  9.2    81      7   31
## 93      39       83  6.9    81      8    1
## 94       9       24 13.8    81      8    2
## 95      16       77  7.4    82      8    3
## 96      78       NA  6.9    86      8    4
## 97      35       NA  7.4    85      8    5
## 98      66       NA  4.6    87      8    6
## 99     122      255  4.0    89      8    7
## 100     89      229 10.3    90      8    8
## 101    110      207  8.0    90      8    9
## 102     NA      222  8.6    92      8   10
## 103     NA      137 11.5    86      8   11
## 104     44      192 11.5    86      8   12
## 105     28      273 11.5    82      8   13
## 106     65      157  9.7    80      8   14
## 107     NA       64 11.5    79      8   15
## 108     22       71 10.3    77      8   16
## 109     59       51  6.3    79      8   17
## 110     23      115  7.4    76      8   18
## 111     31      244 10.9    78      8   19
## 112     44      190 10.3    78      8   20
## 113     21      259 15.5    77      8   21
## 114      9       36 14.3    72      8   22
## 115     NA      255 12.6    75      8   23
## 116     45      212  9.7    79      8   24
## 117    168      238  3.4    81      8   25
```

```
## 118      73      215  8.0      86       8   26
## 119      NA      153  5.7      88       8   27
## 120      76      203  9.7      97       8   28
## 121     118      225  2.3      94       8   29
## 122      84      237  6.3      96       8   30
## 123      85      188  6.3      94       8   31
## 124      96      167  6.9      91       9    1
## 125      78      197  5.1      92       9    2
## 126      73      183  2.8      93       9    3
## 127      91      189  4.6      93       9    4
## 128      47       95  7.4      87       9    5
## 129      32       92 15.5      84       9    6
## 130      20      252 10.9      80       9    7
## 131      23      220 10.3      78       9    8
## 132      21      230 10.9      75       9    9
## 133      24      259  9.7      73       9   10
## 134      44      236 14.9      81       9   11
## 135      21      259 15.5      76       9   12
## 136      28      238  6.3      77       9   13
## 137       9       24 10.9      71       9   14
## 138      13      112 11.5      71       9   15
## 139      46      237  6.9      78       9   16
## 140      18      224 13.8      67       9   17
## 141      13       27 10.3      76       9   18
## 142      24      238 10.3      68       9   19
## 143      16      201  8.0      82       9   20
## 144      13      238 12.6      64       9   21
## 145      23       14  9.2      71       9   22
## 146      36      139 10.3      81       9   23
## 147       7       49 10.3      69       9   24
## 148      14       20 16.6      63       9   25
## 149      30      193  6.9      70       9   26
## 150      NA      145 13.2      77       9   27
## 151      14      191 14.3      75       9   28
## 152      18      131  8.0      76       9   29
## 153      20      223 11.5      68       9   30
```

Assignment 2-2

- Method1

```
bad <- is.na(x)
bad
```

```
##         Ozone Solar.R  Wind  Temp Month    Day
##   [1,] FALSE    FALSE FALSE FALSE FALSE  FALSE
##   [2,] FALSE    FALSE FALSE FALSE FALSE  FALSE
##   [3,] FALSE    FALSE FALSE FALSE FALSE  FALSE
##   [4,] FALSE    FALSE FALSE FALSE FALSE  FALSE
##   [5,]  TRUE     TRUE FALSE FALSE FALSE  FALSE
##   [6,] FALSE     TRUE FALSE FALSE FALSE  FALSE
```

```
##  [7,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [8,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [9,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [10,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [11,] FALSE    TRUE FALSE FALSE FALSE FALSE
## [12,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [13,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [14,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [15,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [16,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [17,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [18,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [19,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [20,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [21,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [22,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [23,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [24,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [25,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [26,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [27,]  TRUE    TRUE FALSE FALSE FALSE FALSE
## [28,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [29,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [30,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [31,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [32,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [33,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [34,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [35,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [36,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [37,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [38,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [39,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [40,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [41,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [42,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [43,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [44,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [45,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [46,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [47,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [48,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [49,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [50,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [51,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [52,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [53,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [54,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [55,]  TRUE   FALSE FALSE FALSE FALSE FALSE
```

```
##  [56,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [57,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [58,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [59,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [60,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [61,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [62,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [63,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [64,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [65,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [66,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [67,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [68,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [69,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [70,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [71,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [72,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [73,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [74,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [75,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [76,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [77,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [78,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [79,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [80,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [81,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [82,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [83,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [84,]  TRUE   FALSE FALSE FALSE FALSE FALSE
##  [85,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [86,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [87,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [88,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [89,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [90,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [91,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [92,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [93,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [94,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [95,] FALSE   FALSE FALSE FALSE FALSE FALSE
##  [96,] FALSE    TRUE FALSE FALSE FALSE FALSE
##  [97,] FALSE    TRUE FALSE FALSE FALSE FALSE
##  [98,] FALSE    TRUE FALSE FALSE FALSE FALSE
##  [99,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [100,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [101,] FALSE   FALSE FALSE FALSE FALSE FALSE
## [102,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [103,]  TRUE   FALSE FALSE FALSE FALSE FALSE
## [104,] FALSE   FALSE FALSE FALSE FALSE FALSE
```

```
## [105,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [106,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [107,]  TRUE    FALSE FALSE FALSE FALSE FALSE
## [108,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [109,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [110,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [111,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [112,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [113,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [114,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [115,]  TRUE    FALSE FALSE FALSE FALSE FALSE
## [116,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [117,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [118,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [119,]  TRUE    FALSE FALSE FALSE FALSE FALSE
## [120,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [121,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [122,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [123,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [124,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [125,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [126,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [127,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [128,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [129,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [130,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [131,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [132,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [133,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [134,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [135,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [136,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [137,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [138,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [139,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [140,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [141,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [142,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [143,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [144,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [145,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [146,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [147,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [148,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [149,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [150,]  TRUE    FALSE FALSE FALSE FALSE FALSE
## [151,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [152,] FALSE    FALSE FALSE FALSE FALSE FALSE
## [153,] FALSE    FALSE FALSE FALSE FALSE FALSE
```

```
x1 <- x[!bad]
```

- Method2

```
good <- complete.cases(x)
good
```

```
##   [1]  TRUE  TRUE  TRUE  TRUE FALSE FALSE  TRUE  TRUE  TRUE FALSE FALSE  T
RUE
##  [13]  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  T
RUE
##  [25] FALSE FALSE FALSE  TRUE  TRUE  TRUE  TRUE FALSE FALSE FALSE FALSE FA
LSE
##  [37] FALSE  TRUE FALSE  TRUE  TRUE FALSE FALSE  TRUE FALSE FALSE  TRUE  T
RUE
##  [49]  TRUE  TRUE  TRUE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FA
LSE
##  [61] FALSE  TRUE  TRUE  TRUE FALSE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE FA
LSE
##  [73]  TRUE  TRUE FALSE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE FALSE FA
LSE
##  [85]  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE FA
LSE
##  [97] FALSE FALSE  TRUE  TRUE  TRUE FALSE FALSE  TRUE  TRUE  TRUE FALSE  T
RUE
## [109]  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE FALSE  TRUE  TRUE  TRUE FALSE  T
RUE
## [121]  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  T
RUE
## [133]  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  TRUE  T
RUE
## [145]  TRUE  TRUE  TRUE  TRUE  TRUE FALSE  TRUE  TRUE  TRUE
```

```
x2 <- x[good, ]
x2
```

```
##     Ozone Solar.R Wind Temp Month Day
## 1      41     190  7.4   67     5   1
## 2      36     118  8.0   72     5   2
## 3      12     149 12.6   74     5   3
## 4      18     313 11.5   62     5   4
## 7      23     299  8.6   65     5   7
## 8      19      99 13.8   59     5   8
## 9       8      19 20.1   61     5   9
## 12     16     256  9.7   69     5  12
## 13     11     290  9.2   66     5  13
## 14     14     274 10.9   68     5  14
## 15     18      65 13.2   58     5  15
## 16     14     334 11.5   64     5  16
## 17     34     307 12.0   66     5  17
```

```
## 18      6     78 18.4    57    5    18
## 19     30    322 11.5    68    5    19
## 20     11     44  9.7    62    5    20
## 21      1      8  9.7    59    5    21
## 22     11    320 16.6    73    5    22
## 23      4     25  9.7    61    5    23
## 24     32     92 12.0    61    5    24
## 28     23     13 12.0    67    5    28
## 29     45    252 14.9    81    5    29
## 30    115    223  5.7    79    5    30
## 31     37    279  7.4    76    5    31
## 38     29    127  9.7    82    6     7
## 40     71    291 13.8    90    6     9
## 41     39    323 11.5    87    6    10
## 44     23    148  8.0    82    6    13
## 47     21    191 14.9    77    6    16
## 48     37    284 20.7    72    6    17
## 49     20     37  9.2    65    6    18
## 50     12    120 11.5    73    6    19
## 51     13    137 10.3    76    6    20
## 62    135    269  4.1    84    7     1
## 63     49    248  9.2    85    7     2
## 64     32    236  9.2    81    7     3
## 66     64    175  4.6    83    7     5
## 67     40    314 10.9    83    7     6
## 68     77    276  5.1    88    7     7
## 69     97    267  6.3    92    7     8
## 70     97    272  5.7    92    7     9
## 71     85    175  7.4    89    7    10
## 73     10    264 14.3    73    7    12
## 74     27    175 14.9    81    7    13
## 76      7     48 14.3    80    7    15
## 77     48    260  6.9    81    7    16
## 78     35    274 10.3    82    7    17
## 79     61    285  6.3    84    7    18
## 80     79    187  5.1    87    7    19
## 81     63    220 11.5    85    7    20
## 82     16      7  6.9    74    7    21
## 85     80    294  8.6    86    7    24
## 86    108    223  8.0    85    7    25
## 87     20     81  8.6    82    7    26
## 88     52     82 12.0    86    7    27
## 89     82    213  7.4    88    7    28
## 90     50    275  7.4    86    7    29
## 91     64    253  7.4    83    7    30
## 92     59    254  9.2    81    7    31
## 93     39     83  6.9    81    8     1
## 94      9     24 13.8    81    8     2
## 95     16     77  7.4    82    8     3
```

```
## 99    122    255   4.0    89    8    7
## 100    89    229  10.3    90    8    8
## 101   110    207   8.0    90    8    9
## 104    44    192  11.5    86    8   12
## 105    28    273  11.5    82    8   13
## 106    65    157   9.7    80    8   14
## 108    22     71  10.3    77    8   16
## 109    59     51   6.3    79    8   17
## 110    23    115   7.4    76    8   18
## 111    31    244  10.9    78    8   19
## 112    44    190  10.3    78    8   20
## 113    21    259  15.5    77    8   21
## 114     9     36  14.3    72    8   22
## 116    45    212   9.7    79    8   24
## 117   168    238   3.4    81    8   25
## 118    73    215   8.0    86    8   26
## 120    76    203   9.7    97    8   28
## 121   118    225   2.3    94    8   29
## 122    84    237   6.3    96    8   30
## 123    85    188   6.3    94    8   31
## 124    96    167   6.9    91    9    1
## 125    78    197   5.1    92    9    2
## 126    73    183   2.8    93    9    3
## 127    91    189   4.6    93    9    4
## 128    47     95   7.4    87    9    5
## 129    32     92  15.5    84    9    6
## 130    20    252  10.9    80    9    7
## 131    23    220  10.3    78    9    8
## 132    21    230  10.9    75    9    9
## 133    24    259   9.7    73    9   10
## 134    44    236  14.9    81    9   11
## 135    21    259  15.5    76    9   12
## 136    28    238   6.3    77    9   13
## 137     9     24  10.9    71    9   14
## 138    13    112  11.5    71    9   15
## 139    46    237   6.9    78    9   16
## 140    18    224  13.8    67    9   17
## 141    13     27  10.3    76    9   18
## 142    24    238  10.3    68    9   19
## 143    16    201   8.0    82    9   20
## 144    13    238  12.6    64    9   21
## 145    23     14   9.2    71    9   22
## 146    36    139  10.3    81    9   23
## 147     7     49  10.3    69    9   24
## 148    14     20  16.6    63    9   25
## 149    30    193   6.9    70    9   26
## 151    14    191  14.3    75    9   28
## 152    18    131   8.0    76    9   29
## 153    20    223  11.5    68    9   30
```

Assignment 2-3

"Knit to PDF" function does not work due to the below reason which I don't understand 'LaTeX failed to compile Rmarkdown_Assignment2.tex. See https://yihui.org/tinytex/r/#debugging for debugging tips. See Rmarkdown_Assignment2.log for more info.' So I knit to Word file first and convert it to PDF.

Assignment 2-4 to 2-7

I did as per the instruction. Thank you.

END