



Arpan Sapkota

2023-05-06

a

```
data("airquality")
AQ <- airquality
```

b

```
str(AQ)
```

```
## 'data.frame':    153 obs. of  6 variables:
##  $ Ozone   : int  41 36 12 18 NA 28 23 19 8 NA ...
##  $ Solar.R: int  190 118 149 313 NA NA 299 99 19 194 ...
##  $ Wind    : num  7.4 8 12.6 11.5 14.3 14.9 8.6 13.8 20.1 8.6 ...
##  $ Temp    : int  67 72 74 62 56 66 65 59 61 69 ...
##  $ Month   : int  5 5 5 5 5 5 5 5 5 5 ...
##  $ Day     : int  1 2 3 4 5 6 7 8 9 10 ...
```

```
# Here Wind is a numeric variable and rest other are all the integer variable
```

c

```
library(tidyr)

AQ$Ozone <- as.double(AQ$Ozone)
AQ$Ozone <- replace_na(AQ$Ozone, median(AQ$Ozone, na.rm = TRUE))
```

d

```
AQ$Solar.R <- replace_na(AQ$Solar.R, median(AQ$Solar.R, na.rm = TRUE))
AQ$Solar.R
```

```
## [1] 190 118 149 313 205 205 299 99 19 194 205 256 290 274 65 334 307 78
## [19] 322 44 8 320 25 92 66 266 205 13 252 223 279 286 287 242 186 220
## [37] 264 127 273 291 323 259 250 148 332 322 191 284 37 120 137 150 59 91
## [55] 250 135 127 47 98 31 138 269 248 236 101 175 314 276 267 272 175 139
## [73] 264 175 291 48 260 274 285 187 220 7 258 295 294 223 81 82 213 275
## [91] 253 254 83 24 77 205 205 205 255 229 207 222 137 192 273 157 64 71
## [109] 51 115 244 190 259 36 255 212 238 215 153 203 225 237 188 167 197 183
## [127] 189 95 92 252 220 230 259 236 259 238 24 112 237 224 27 238 201 238
## [145] 14 139 49 20 193 145 191 131 223
```

e

```
AQ$Date <- as.Date(paste("2020", AQ$Month, AQ$Day, sep = "-"), format = "%Y-%m-%d")
AQ$Date
```

```
## [1] "2020-05-01" "2020-05-02" "2020-05-03" "2020-05-04" "2020-05-05"
## [6] "2020-05-06" "2020-05-07" "2020-05-08" "2020-05-09" "2020-05-10"
## [11] "2020-05-11" "2020-05-12" "2020-05-13" "2020-05-14" "2020-05-15"
## [16] "2020-05-16" "2020-05-17" "2020-05-18" "2020-05-19" "2020-05-20"
## [21] "2020-05-21" "2020-05-22" "2020-05-23" "2020-05-24" "2020-05-25"
## [26] "2020-05-26" "2020-05-27" "2020-05-28" "2020-05-29" "2020-05-30"
## [31] "2020-05-31" "2020-06-01" "2020-06-02" "2020-06-03" "2020-06-04"
## [36] "2020-06-05" "2020-06-06" "2020-06-07" "2020-06-08" "2020-06-09"
## [41] "2020-06-10" "2020-06-11" "2020-06-12" "2020-06-13" "2020-06-14"
## [46] "2020-06-15" "2020-06-16" "2020-06-17" "2020-06-18" "2020-06-19"
## [51] "2020-06-20" "2020-06-21" "2020-06-22" "2020-06-23" "2020-06-24"
## [56] "2020-06-25" "2020-06-26" "2020-06-27" "2020-06-28" "2020-06-29"
## [61] "2020-06-30" "2020-07-01" "2020-07-02" "2020-07-03" "2020-07-04"
## [66] "2020-07-05" "2020-07-06" "2020-07-07" "2020-07-08" "2020-07-09"
## [71] "2020-07-10" "2020-07-11" "2020-07-12" "2020-07-13" "2020-07-14"
## [76] "2020-07-15" "2020-07-16" "2020-07-17" "2020-07-18" "2020-07-19"
## [81] "2020-07-20" "2020-07-21" "2020-07-22" "2020-07-23" "2020-07-24"
## [86] "2020-07-25" "2020-07-26" "2020-07-27" "2020-07-28" "2020-07-29"
## [91] "2020-07-30" "2020-07-31" "2020-08-01" "2020-08-02" "2020-08-03"
## [96] "2020-08-04" "2020-08-05" "2020-08-06" "2020-08-07" "2020-08-08"
## [101] "2020-08-09" "2020-08-10" "2020-08-11" "2020-08-12" "2020-08-13"
## [106] "2020-08-14" "2020-08-15" "2020-08-16" "2020-08-17" "2020-08-18"
## [111] "2020-08-19" "2020-08-20" "2020-08-21" "2020-08-22" "2020-08-23"
## [116] "2020-08-24" "2020-08-25" "2020-08-26" "2020-08-27" "2020-08-28"
## [121] "2020-08-29" "2020-08-30" "2020-08-31" "2020-09-01" "2020-09-02"
## [126] "2020-09-03" "2020-09-04" "2020-09-05" "2020-09-06" "2020-09-07"
## [131] "2020-09-08" "2020-09-09" "2020-09-10" "2020-09-11" "2020-09-12"
## [136] "2020-09-13" "2020-09-14" "2020-09-15" "2020-09-16" "2020-09-17"
## [141] "2020-09-18" "2020-09-19" "2020-09-20" "2020-09-21" "2020-09-22"
## [146] "2020-09-23" "2020-09-24" "2020-09-25" "2020-09-26" "2020-09-27"
## [151] "2020-09-28" "2020-09-29" "2020-09-30"
```