## desafio 1

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carregue os dados utilizando as funções: read.csv() do pacote base do

```
# medir o tempo
start_time <- Sys.time()</pre>
getwd()
## [1] "C:/Users/Shophia/Documents/me315"
setwd("C:/Users/Shophia/Documents/me315")
flights_base <- read.csv("flights.csv.zip")</pre>
## Warning in read.table(file = file, header = header, sep = sep, quote = quote, :
## line 1 appears to contain embedded nulls
## Warning in read.table(file = file, header = header, sep = sep, quote = quote, :
## line 2 appears to contain embedded nulls
## Warning in scan(file = file, what = what, sep = sep, quote = quote, dec = dec,
## : EOF within quoted string
## Warning in scan(file = file, what = what, sep = sep, quote = quote, dec = dec,
## : EOF within quoted string
## Warning in scan(file = file, what = what, sep = sep, quote = quote, dec = dec,
## : embedded nul(s) found in input
end_time <- Sys.time()</pre>
tempo_base <- end_time - start_time</pre>
print(tempo_base)
## Time difference of 0.008541107 secs
read csv() do pacote readr do
library(readr)
start_time <- Sys.time()</pre>
flights_readr <- read_csv("flights.csv.zip")</pre>
```

```
## Rows: 5819079 Columns: 31
## -- Column specification ------
## Delimiter: ","
## chr (11): AIRLINE, TAIL_NUMBER, ORIGIN_AIRPORT, DESTINATION_AIRPORT, SCHEDUL...
## dbl (20): YEAR, MONTH, DAY, DAY_OF_WEEK, FLIGHT_NUMBER, DEPARTURE_DELAY, TAX...
## 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.
end_time <- Sys.time()</pre>
tempo_readr <- end_time - start_time</pre>
print(tempo_readr)
## Time difference of 18.01815 secs
read_csv() do pandas no
import pandas as pd
import time
start_time = time.time()
flights_pd = pd.read_csv("flights.csv.zip")
## <string>:2: DtypeWarning: Columns (7,8) have mixed types. Specify dtype option on import or set low_:
end_time = time.time()
tempo_pd = end_time - start_time
print("Tempo pandas:", tempo_pd, "segundos")
```

## Tempo pandas: 18.383955478668213 segundos