Homework #11

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Problem 1

```
KEY <- 'PPzQ0BEBtzpkQN4ryAamlYmF0NEOpHAB'
movies <- movie_info(
  query = 'women',
  start_date = '2010-01-01',
  end_date = '2020-01-01',
  key = KEY
)

movies[, .(name, opening)]
```

```
##                                       name    opening
##  1:                          What Women Want 2011-02-03
##  2:           The Women on the Sixth Floor 2011-10-07
##  3:                            Half The Road 2014-04-18
##  4:                  Men, Women & Children 2014-10-17
##  5:                               Mad Women 2015-07-10
##  6:           Abortion: Stories Women Tell 2016-08-12
##  7:                            Certain Women 2016-10-14
##  8:                      20th Century Women 2017-01-20
##  9:                     The Women's Balcony 2017-05-26
## 10:                          Women Who Kill 2017-07-26
## 11: Professor Marston and the Wonder Women 2017-10-13
## 12:                            Little Women 2019-12-25
```

Problem 2

```
show_review(movies, 12)
```

Problem 3

```
say_summary(movies, 12)
```

Problem 4

```
movs <- map_dfr(1980:1990, function(year) {
  repeat {
```

```
    out <- movie_info(
      start_date = paste(year, '-07-01', sep = ''),
      end_date = paste(year, '-07-31', sep = ''),
      key = KEY
    )
    if(nrow(out) > 0) break
  }
  return(out)
})

summaries <- movs$summary

# Number of movies reviewed
length(summaries)
```

```
## [1] 157
```

```
# Find longest summary by words
longest_summary <- str_split(summaries, pattern = ' ') %>% lengths %>% which.max()
print(summaries[longest_summary])
```

```
## [1] "When the masked champion of justice is injured, his gay twin brother takes up the torch. Has a
```

```
say_summary(movs, longest_summary)
show_review(movs, longest_summary)
```

Code

analysis.R

```
movie_info <- function(query = '', start_date = '', end_date = '', key) {
  url <- paste(
    'https://api.nytimes.com/svc/movies/v2/reviews/search.json?query=', query,
    '&opening-date=', start_date,
    ';', end_date,
    '&api-key=', key,
    '&order=by-opening-date',
    '&offset=', sep = ''
  )

  i = 0
  out <- data.table(matrix(ncol = 4, nrow = 0))
  names(out) <- c('name', 'opening', 'summary', 'url')

  repeat {
    url_offset <- paste(url, 20 * i, sep = '')
    query <- GET(url_offset)
    dat <- query$content %>% rawToChar %>% fromJSON

    if(query$status_code %in% c(429, 400)) break # Query limit exceeded
    if(dat$num_results == 0) break # No results returned

    out <- rbind(out, data.table(
      name = dat$results$display_title,
      opening = dat$results$opening_date,
      summary = dat$results$summary_short,
      url = dat$results$link$url
    ))

    i = i + 1
  }

  return(out)
}

show_review <- function(mi, i)
  system(paste(
    '"/Applications/Google Chrome.app/Contents/MacOS/Google Chrome"',
    mi$url[i]
  ))

say_summary <- function(mi, i) {
  system(paste(
    'say', mi$summary[i]
  ))
}
```

config.R

```
source('analysis.R')

library(tidyverse)
library(magrittr)
library(data.table)
library(httr)
library(jsonlite)
```