

# RWorksheet#5\_group(Lomibao,rabago and andigan)

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```
library(kableExtra)
library("rvest")
library("polite")
library("dplyr")

##
## Attaching package: 'dplyr'

## The following object is masked from 'package:kableExtra':
##
##   group_rows

## The following objects are masked from 'package:stats':
##
##   filter, lag

## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union

polite::use_manners(save_as = 'polite_scrape.R')

## v Setting active project to "/cloud/project".

url <- "https://www.imdb.com/chart/toptv/"
webpage <- read_html(url)
session <- bow(url,
               user_agent = "Student education purpose")
session

## <polite session> https://www.imdb.com/chart/toptv/
##   User-agent: Student education purpose
##   robots.txt: 35 rules are defined for 3 bots
##   Crawl delay: 5 sec
##   The path is scrapable for this user-agent

page <- scrape(session)

scraping the title

title <- page%>%html_nodes('h3.ipc-title__text')%>%html_text()
title <- title[2:26]
title

## [1] "1. Breaking Bad"
## [2] "2. Planet Earth II"
## [3] "3. Planet Earth"
## [4] "4. Band of Brothers"
## [5] "5. Chernobyl"
## [6] "6. The Wire"
```

```
## [7] "7. Avatar: The Last Airbender"
## [8] "8. Blue Planet II"
## [9] "9. The Sopranos"
## [10] "10. Cosmos: A Spacetime Odyssey"
## [11] "11. Cosmos"
## [12] "12. Our Planet"
## [13] "13. Game of Thrones"
## [14] "14. Bluey"
## [15] "15. The World at War"
## [16] "16. Fullmetal Alchemist: Brotherhood"
## [17] "17. Rick and Morty"
## [18] "18. Life"
## [19] "19. The Last Dance"
## [20] "20. The Twilight Zone"
## [21] "21. The Vietnam War"
## [22] "22. Sherlock"
## [23] "23. Attack on Titan"
## [24] "24. Batman: The Animated Series"
## [25] "25. Arcane"
```

scraping the rating

```
ratings<- page %>%
  html_nodes('span.ipc-rating-star--rating') %>%
  html_text()
ratings
```

```
## [1] "9.5" "9.5" "9.4" "9.4" "9.3" "9.3" "9.3" "9.3" "9.2" "9.2" "9.3" "9.2"
## [13] "9.2" "9.3" "9.2" "9.1" "9.1" "9.1" "9.0" "9.0" "9.1" "9.1" "9.1" "9.0"
## [25] "9.0"
```

scraping the numbers of vote

```
number_votes <- page %>%
  html_nodes("span.ipc-rating-star--voteCount") %>%
  html_text()
number_votes
```

```
## [1] " (2.2M)" " (162K)" " (224K)" " (546K)" " (908K)" " (391K)" " (390K)"
## [8] " (49K)" " (499K)" " (131K)" " (46K)" " (54K)" " (2.4M)" " (34K)"
## [15] " (31K)" " (209K)" " (628K)" " (44K)" " (160K)" " (97K)" " (29K)"
## [22] " (1M)" " (563K)" " (122K)" " (318K)"
```

scraping the number of episode

```
num_ep <- page %>%
  html_nodes('span.sc-6-ade9358-7.exckou.cli-title-metadata-item') %>%
  html_text()
num_ep
```

```
## character(0)
```

Cleaning the episode data

```
# episode <- str_extract(num_ep, "\\d+ eps")
# episodes <- str_remove(episode, " eps")
# episodes <- as.numeric(episodes)
# episodes
```

scraping the year release

```
year <- page %>%
  html_nodes("span.sc-5bc66c50-6.00dsw.cli-title-metadata-item") %>%
  html_text()
year
```

```
## character(0)
```

Extract using the regex

```
#release_years <- str_extract(year, "\\d{4}")
#release_years <- release_years[!is.na(release_years)]
#release_years <- as.numeric(release_years)
```

checking the length.

```
#cat("Show Titles length: ", length(title), "\n")
#cat("Show Ratings length: ", length(ratings), "\n")
#cat("Number of Votes length: ", length(number_votes), "\n")
#cat("Episode Counts length: ", length(epsisodes), "\n")
#cat("Release Years length: ", length(release_years), "\n")
```

```
title_list <- as.data.frame(title[1:50])
colnames(title_list)<-"ranks"
```

splitting the data frame

```
split_df <- strsplit(as.character(title_list$ranks), ".", fixed = TRUE)
split_df <- data.frame(do.call(rbind, split_df))
split_df
```

```
##      X1      X2
## 1      1      Breaking Bad
## 2      2      Planet Earth II
## 3      3      Planet Earth
## 4      4      Band of Brothers
## 5      5      Chernobyl
## 6      6      The Wire
## 7      7      Avatar: The Last Airbender
## 8      8      Blue Planet II
## 9      9      The Sopranos
## 10    10      Cosmos: A Spacetime Odyssey
## 11    11      Cosmos
## 12    12      Our Planet
## 13    13      Game of Thrones
## 14    14      Bluey
## 15    15      The World at War
## 16    16      Fullmetal Alchemist: Brotherhood
## 17    17      Rick and Morty
## 18    18      Life
## 19    19      The Last Dance
## 20    20      The Twilight Zone
## 21    21      The Vietnam War
## 22    22      Sherlock
## 23    23      Attack on Titan
## 24    24      Batman: The Animated Series
## 25    25      Arcane
```

```
## 26 <NA> <NA>
## 27 <NA> <NA>
## 28 <NA> <NA>
## 29 <NA> <NA>
## 30 <NA> <NA>
## 31 <NA> <NA>
## 32 <NA> <NA>
## 33 <NA> <NA>
## 34 <NA> <NA>
## 35 <NA> <NA>
## 36 <NA> <NA>
## 37 <NA> <NA>
## 38 <NA> <NA>
## 39 <NA> <NA>
## 40 <NA> <NA>
## 41 <NA> <NA>
## 42 <NA> <NA>
## 43 <NA> <NA>
## 44 <NA> <NA>
## 45 <NA> <NA>
## 46 <NA> <NA>
## 47 <NA> <NA>
## 48 <NA> <NA>
## 49 <NA> <NA>
## 50 <NA> <NA>
```

renaming columns

```
split_df<-split_df[-c(3,4)]
colnames(split_df)<- c("Ranks","Titles")
split_df
```

##	Ranks	Titles
## 1	1	Breaking Bad
## 2	2	Planet Earth II
## 3	3	Planet Earth
## 4	4	Band of Brothers
## 5	5	Chernobyl
## 6	6	The Wire
## 7	7	Avatar: The Last Airbender
## 8	8	Blue Planet II
## 9	9	The Sopranos
## 10	10	Cosmos: A Spacetime Odyssey
## 11	11	Cosmos
## 12	12	Our Planet
## 13	13	Game of Thrones
## 14	14	Bluey
## 15	15	The World at War
## 16	16	Fullmetal Alchemist: Brotherhood
## 17	17	Rick and Morty
## 18	18	Life
## 19	19	The Last Dance
## 20	20	The Twilight Zone
## 21	21	The Vietnam War
## 22	22	Sherlock

```
## 23      23      Attack on Titan
## 24      24      Batman: The Animated Series
## 25      25      Arcane
## 26 <NA>      <NA>
## 27 <NA>      <NA>
## 28 <NA>      <NA>
## 29 <NA>      <NA>
## 30 <NA>      <NA>
## 31 <NA>      <NA>
## 32 <NA>      <NA>
## 33 <NA>      <NA>
## 34 <NA>      <NA>
## 35 <NA>      <NA>
## 36 <NA>      <NA>
## 37 <NA>      <NA>
## 38 <NA>      <NA>
## 39 <NA>      <NA>
## 40 <NA>      <NA>
## 41 <NA>      <NA>
## 42 <NA>      <NA>
## 43 <NA>      <NA>
## 44 <NA>      <NA>
## 45 <NA>      <NA>
## 46 <NA>      <NA>
## 47 <NA>      <NA>
## 48 <NA>      <NA>
## 49 <NA>      <NA>
## 50 <NA>      <NA>
```

creating csv for title and ranks

```
rank_title <- data.frame(
  rank_title = split_df)

write.csv(rank_title,file = "title.csv")
```

Combining them all to a data frame.

```
# imdb_top_tv_shows <- data.frame(
# Title = title,
# Rating = ratings,
# Votes = number_votes,
# Episode = episodes,
# Release_Year = release_years,
# stringsAsFactors = FALSE
# )
```

R scraping

```
library('rvest')
library('polite')

polite::use_manners(save_as = 'polite_scrape.R')

urlr <- "https://www.amazon.com/?tag=phtxtabkgode-20&ref=pd_sl_73t48p1dlf_e&adgrpid=151590336221&hvpon"
```

```
session2 <- bow(urlr,
                 user_agent = "Student's Demo Educational")
session2
```

```
## <polite session> https://www.amazon.com/?&tag=phtxtabkgode-20&ref=pd_sl_73t48p1dlf_e&adgrpid=1515903
##   User-agent: Student's Demo Educational
##   robots.txt: 138 rules are defined for 5 bots
##   Crawl delay: 5 sec
##   The path is scrapable for this user-agent
```

```
page2 <- scrape(session2)
```

Creating a empty vector.

```
links <- character()
img_srcs <- character()
titles <- character()
prices <- character()
ratings <- character()
```

url for categories

```
shirt_cat<- "https://www.amazon.com/s?k=shirt&i=fashion-mens-intl-ship&crd=6IQRNOUJ0LB&sprefix=shirt%
pants_cat <- "https://www.amazon.com/s?k=pants&i=fashion-mens-intl-ship&crd=9U0VNEZTF2CR&sprefix=pants%
shoe_cat<- "https://www.amazon.com/s?k=shoes&i=fashion-mens-intl-ship&crd=ADB2HOWLHCPK&sprefix=sho%2Cf
head_phone <- "https://www.amazon.com/s?k=headphone&i=fashion-mens-intl-ship&crd=25P9FL9QS4YNZ&sprefix=i
medkit_cat<- "https://www.amazon.com/s?k=medkit&i=fashion-mens-intl-ship&crd=1HF70Z2EVLHQY&sprefix=medk
```