

RWorksheet#5_group.Rmd

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```
library(rvest)
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##   filter, lag
## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union
```

```
library(stringr)
library(polite)
library(kableExtra)
```

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

```
library(knitr)
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v forcats   1.0.0      v readr     2.1.5
## v ggplot2    3.5.1      v tibble   3.2.1
## v lubridate  1.9.3      v tidyr    1.3.1
## v purrr      1.0.2
```

```
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter()          masks stats::filter()
## x kableExtra::group_rows() masks dplyr::group_rows()
## x readr::guess_encoding()  masks rvest::guess_encoding()
## x dplyr::lag()             masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
library(ggplot2)
```

```
link = "https://www.imdb.com/chart/toptv/"
page = read_html(link)
session <- bow(link, user_agent = "Educational")
session
```

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

nam <- page %>% html_nodes(".ipc-title__text") %>% html_text()
name <- nam[!grepl("Top 250 TV Shows|IMDb Charts|Recently viewed|More to explore", nam, ignore.case = T), ]
name

## [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. The Office"

rank <- str_extract(name, "^\\d+\\.")
rank

## [1] "1." "2." "3." "4." "5." "6." "7." "8." "9." "10." "11." "12."
## [13] "13." "14." "15." "16." "17." "18." "19." "20." "21." "22." "23." "24."
## [25] "25."

title <- str_replace(name, "^\\d+\\. ", "")
title

## [1] " Breaking Bad" " Planet Earth II"
## [3] " Planet Earth" " Band of Brothers"
## [5] " Chernobyl" " The Wire"
## [7] " Avatar: The Last Airbender" " Blue Planet II"
## [9] " The Sopranos" " Cosmos: A Spacetime Odyssey"
## [11] " Cosmos" " Our Planet"
## [13] " Game of Thrones" " Bluey"
## [15] " The World at War" " Fullmetal Alchemist: Brotherhood"
## [17] " Rick and Morty" " Life"
## [19] " The Last Dance" " The Twilight Zone"
## [21] " The Vietnam War" " Sherlock"
```

```

## [23] " Attack on Titan"                " Batman: The Animated Series"
## [25] " The Office"

yea = page %>% html_nodes(".sc-5bc66c50-6.00dsw.cli-title-metadata-item") %>% html_text()
year <- str_extract_all(yea, "\\b\\d{4}(?:-\\d{4})?\\b") %>% unlist()
year

## [1] "2008-2013" "2016"          "2006"          "2001"          "2019"          "2002-2008"
## [7] "2005-2008" "2017"          "1999-2007" "2014"          "1980"          "2019-2023"
## [13] "2011-2019" "2018"          "1973-1974" "2009-2010" "2013"          "2009"
## [19] "2020"       "1959-1964" "2017"          "2010-2017" "2013-2023" "1992-1995"
## [25] "2005-2013"

rating = page %>% html_nodes(".ipc-rating-star--rating") %>% html_text()
rating

## [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" "9.1" "9.0" "9.1" "9.1" "9.1" "9.0"
## [25] "9.0"

episode <- page %>% html_nodes(".sc-5bc66c50-6.00dsw.cli-title-metadata-item") %>%
html_text()
episodes <- str_extract_all(episode, "\\b\\d+ eps\\b") %>% unlist()
episodes

## [1] "62 eps" "6 eps" "11 eps" "10 eps" "5 eps" "60 eps" "62 eps"
## [8] "7 eps" "86 eps" "13 eps" "13 eps" "12 eps" "74 eps" "194 eps"
## [15] "26 eps" "68 eps" "78 eps" "11 eps" "10 eps" "156 eps" "10 eps"
## [22] "15 eps" "98 eps" "85 eps" "188 eps"

vote = page %>% html_nodes(".ipc-rating-star--voteCount") %>% html_text()
vote

## [1] " (2.2M)" " (162K)" " (223K)" " (544K)" " (905K)" " (390K)" " (388K)"
## [8] " (48K)" " (497K)" " (131K)" " (45K)" " (53K)" " (2.4M)" " (33K)"
## [15] " (31K)" " (208K)" " (626K)" " (43K)" " (159K)" " (96K)" " (29K)"
## [22] " (1M)" " (558K)" " (122K)" " (744K)"

urls <- c("https://www.imdb.com/title/tt0903747/?ref=chttvtp_i_1",
"https://www.imdb.com/title/tt5491994/?ref=chttvtp_i_2",
"https://www.imdb.com/title/tt0795176/?ref=chttvtp_i_3",
"https://www.imdb.com/title/tt0185906/?ref=chttvtp_i_4",
"https://www.imdb.com/title/tt7366338/?ref=chttvtp_i_5",
"https://www.imdb.com/title/tt0306414/?ref=chttvtp_i_6",
"https://www.imdb.com/title/tt0417299/?ref=chttvtp_i_7",
"https://www.imdb.com/title/tt6769208/?ref=chttvtp_i_8",
"https://www.imdb.com/title/tt0141842/?ref=chttvtp_i_9",
"https://www.imdb.com/title/tt2395695/?ref=chttvtp_i_10",
"https://www.imdb.com/title/tt0081846/?ref=chttvtp_i_11",
"https://www.imdb.com/title/tt9253866/?ref=chttvtp_i_12",
"https://www.imdb.com/title/tt0944947/?ref=chttvtp_i_13",
"https://www.imdb.com/title/tt7678620/?ref=chttvtp_i_14",
"https://www.imdb.com/title/tt0071075/?ref=chttvtp_i_15",
"https://www.imdb.com/title/tt1355642/?ref=chttvtp_i_16",
"https://www.imdb.com/title/tt2861424/?ref=chttvtp_i_17",
"https://www.imdb.com/title/tt1533395/?ref=chttvtp_i_18",
"https://www.imdb.com/title/tt8420184/?ref=chttvtp_i_19",

```

```

      "https://www.imdb.com/title/tt0052520/?ref=chtvtp_i_20",
      "https://www.imdb.com/title/tt1877514/?ref=chtvtp_i_21",
      "https://www.imdb.com/title/tt1475582/?ref=chtvtp_i_22",
      "https://www.imdb.com/title/tt2560140/?ref=chtvtp_i_23",
      "https://www.imdb.com/title/tt0103359/?ref=chtvtp_i_24",
      "https://www.imdb.com/title/tt0386676/?ref=chtvtp_i_25")

user_reviews <- vector("numeric", length(urls))
critic_reviews <- vector("numeric", length(urls))
popularity <- vector("numeric", length(urls))

for (i in seq_along(urls)) {

  session <- bow(urls[i], user_agent = "Educational")

  webpage <- scrape(session)

  popularity_text <- webpage %>% html_nodes(".sc-39d285cf-1.dxqvqi") %>% html_text()
  popularity[i] <- as.numeric(gsub(",", "", popularity_text[1]))

  reviewz <- webpage %>% html_nodes(".score") %>% html_text()

  if (length(reviewz) >= 2) {

    user_reviews[i] <- ifelse(grepl("K", reviewz[1]),
                             as.numeric(gsub("K", "", reviewz[1])) * 1000,
                             as.numeric(reviewz[1]))
    critic_reviews[i] <- as.numeric(reviewz[2])
  } else {
    user_reviews[i] <- NA
    critic_reviews[i] <- NA
  }
}

```

```
user_reviews
```

```
## [1] 5000 158 111 1000 3500 786 997 53 960 205 80 245 5800 366 126
## [16] 463 908 12 541 213 175 1000 2300 218 1700
```

```
critic_reviews
```

```
## [1] 175 6 10 34 88 77 57 9 93 12 8 15 368 4 5 16 94 9 28
## [20] 85 13 121 64 25 76
```

```
popularity
```

```
## [1] 18 1144 2090 172 176 106 384 4625 37 1483 3922 2955 12 391 2383
## [16] 504 146 3388 1472 315 1878 178 61 498 56
```

```

max_length <- max(length(rank), length(title), length(year), length(rating), length(
rank <- c(rank, rep(NA, max_length - length(rank)))
title <- c(title, rep(NA, max_length - length(title)))
year <- c(year, rep(NA, max_length - length(year)))
rating <- c(rating, rep(NA, max_length - length(rating)))
episodes <- c(episodes, rep(NA, max_length - length(episodes)))

```

```

vote <- c(vote, rep(NA, max_length - length(vote)))
user_reviews <- c(user_reviews, rep(NA, max_length - length(user_reviews)))
critic_reviews <- c(critic_reviews, rep(NA, max_length - length(critic_reviews)))
popularity <- c(popularity, rep(NA, max_length - length(popularity)))
max_length

```

```
## [1] 25
```

```
movies = data.frame(rank, title, year, rating, episodes, vote, user_reviews, critic_reviews, popularity)
```

```

write.csv(movies, "movies.csv")
print(head(movies))

```

```

##   rank      title      year rating episodes      vote user_reviews
## 1    1.  Breaking Bad 2008-2013   9.5   62 eps (2.2M)         5000
## 2    2.  Planet Earth II    2016   9.5    6 eps (162K)          158
## 3    3.  Planet Earth      2006   9.4   11 eps (223K)           111
## 4    4.  Band of Brothers   2001   9.4   10 eps (544K)         1000
## 5    5.  Chernobyl         2019   9.3    5 eps (905K)         3500
## 6    6.  The Wire 2002-2008   9.3   60 eps (390K)           786
##   critic_reviews popularity
## 1             175         18
## 2              6        1144
## 3             10        2090
## 4             34         172
## 5             88         176
## 6             77         106

```

```

movies %>%
  kable("latex", booktabs = TRUE) %>%
  kable_styling(latex_options = "scale_down")

```

```

rl <- c("https://www.imdb.com/title/tt0903747/reviews/?ref=tt_ov_ql_2",
        "https://www.imdb.com/title/tt5491994/reviews/?ref=tt_ov_ql_2",
        "https://www.imdb.com/title/tt0795176/reviews/?ref=tt_ov_ql_2",
        "https://www.imdb.com/title/tt0185906/reviews/?ref=tt_ov_ql_2",
        "https://www.imdb.com/title/tt7366338/reviews/?ref=tt_ov_ql_2")

```

```

NAME <- vector("list", length(rl))
date_of_review <- vector("list", length(rl))
user_ratings <- vector("list", length(rl))
title_of_review <- vector("list", length(rl))
is_helpful <- vector("list", length(rl))
is_not_helpful <- vector("list", length(rl))
text_review <- vector("list", length(rl))
review_data_frames <- vector("list", length(rl))

```

```

for (i in seq_along(rl)) {
  session <- bow(rl[i], user_agent = "Educational")
  webpage <- scrape(session)

  namez <- webpage %>% html_nodes(".ipc-link.ipc-link--base") %>% html_text(trim = TRUE) %>% head(40)
  NAME[[i]] <- namez[!grepl("Permalink", namez, ignore.case = TRUE)]

  date_of_review[[i]] <- webpage %>% html_nodes(".ipc-inline-list__item.review-date") %>% html_text(trim = TRUE)
}

```

rank	title	year	rating	episodes	vote	user_reviews	critic_reviews	popularity
1.	Breaking Bad	2008–2013	9.5	62 eps	(2.2M)	5000	175	18
2.	Planet Earth II	2016	9.5	6 eps	(162K)	158	6	1144
3.	Planet Earth	2006	9.4	11 eps	(223K)	111	10	2090
4.	Band of Brothers	2001	9.4	10 eps	(544K)	1000	34	172
5.	Chernobyl	2019	9.3	5 eps	(905K)	3500	88	176
6.	The Wire	2002–2008	9.3	60 eps	(390K)	786	77	106
7.	Avatar: The Last Airbender	2005–2008	9.3	62 eps	(388K)	997	57	384
8.	Blue Planet II	2017	9.3	7 eps	(48K)	53	9	4625
9.	The Sopranos	1999–2007	9.2	86 eps	(497K)	960	93	37
10.	Cosmos: A Spacetime Odyssey	2014	9.2	13 eps	(131K)	205	12	1483
11.	Cosmos	1980	9.3	13 eps	(45K)	80	8	3922
12.	Our Planet	2019–2023	9.2	12 eps	(53K)	245	15	2955
13.	Game of Thrones	2011–2019	9.2	74 eps	(2.4M)	5800	368	12
14.	Bluey	2018	9.3	194 eps	(33K)	366	4	391
15.	The World at War	1973–1974	9.2	26 eps	(31K)	126	5	2383
16.	Fullmetal Alchemist: Brotherhood	2009–2010	9.1	68 eps	(208K)	463	16	504
17.	Rick and Morty	2013	9.1	78 eps	(626K)	908	94	146
18.	Life	2009	9.1	11 eps	(43K)	12	9	3388
19.	The Last Dance	2020	9.1	10 eps	(159K)	541	28	1472
20.	The Twilight Zone	1959–1964	9.0	156 eps	(96K)	213	85	315
21.	The Vietnam War	2017	9.1	10 eps	(29K)	175	13	1878
22.	Sherlock	2010–2017	9.1	15 eps	(1M)	1000	121	178
23.	Attack on Titan	2013–2023	9.1	98 eps	(558K)	2300	64	61
24.	Batman: The Animated Series	1992–1995	9.0	85 eps	(122K)	218	25	498
25.	The Office	2005–2013	9.0	188 eps	(744K)	1700	76	56

```

user_ratings[[i]] <- webpage %>% html_nodes(".ipc-rating-star--rating") %>% html_text(trim = TRUE) %>% as.numeric()

title_of <- webpage %>% html_nodes(".ipc-title__text") %>% html_text(trim = TRUE) %>% head(21)
title_of_review[[i]] <- title_of[!grepl("User reviews|More from this title|More to explore|Recently viewed", title_of[i])]

text_review[[i]] <- webpage %>% html_nodes(".ipc-html-content-inner-div") %>% html_text(trim = TRUE) %>% as.character()
}

```

```

BreakingBad <- data.frame(NAME[[1]],
  Date = date_of_review[[1]],
  Rating = user_ratings[[1]],
  Title = title_of_review[[1]],
  stringsAsFactors = FALSE
)
write.csv(BreakingBad, "Breaking Bad reviews.csv")
print(head(BreakingBad))

```

```

##      NAME..1..      Date Rating      Title
## 1      FiRE010 Jul 3, 2021    10      Really Great
## 2    bruhperson Mar 6, 2019    10      It's ok I guess
## 3    KinoKoopakid Jul 29, 2021  10      99.1% pure
## 4    jehuschultz Feb 18, 2020  10      The Best
## 5    Supermanfan-13 Nov 8, 2021  10      Damn near perfect!
## 6 manishsingh-03299 May 30, 2019  10      Those days ain't gonna come back..

```

```

BreakingBad %>%
  kable("latex", booktabs = TRUE) %>%
  kable_styling(latex_options = "scale_down")

```

NAME..1..	Date	Rating	Title
FiRE010	Jul 3, 2021	10	Really Great
bruhperson	Mar 6, 2019	10	It's ok I guess
KinoKoopaKid	Jul 29, 2021	10	99.1% pure
jehuschultz	Feb 18, 2020	10	The Best
Supermanfan-13	Nov 8, 2021	10	Damn near perfect!
manishsingh-03299	May 30, 2019	10	Those days ain't gonna come back..
xpinerhd	Nov 15, 2019	10	Best TV show ever made.
Rob1331	Dec 8, 2022	10	Absolutely Brilliant!!
dhanushreddy-14919	Jul 17, 2021	10	ABSOLUTE PERFECTION!!!!
TheLittleSongbird	Nov 12, 2017	10	Among the best and most addictive shows there is
JaxTL	Aug 5, 2022	6	A Masterpiece for sure.
Bauer08	Mar 20, 2021	5	Entertaining and illogical
cursedlovesherbestfriend	Feb 20, 2021	10	Slow pace and obvious plot
tushv-31482	Dec 8, 2022	10	Once in a life time series
gogoschka-1	Jan 11, 2014	10	If you mix Scarface, Robin Hood and maybe Tyler Durden with enough meth - you'll get a mean cocktail called 'Heisenberg'
FishDrowned	Nov 8, 2021	10	By far the greatest show I've ever watched
joegalcano	Aug 11, 2021	10	in a category all on its own.
agatt-87232	May 19, 2019	10	Since GOT is over, this is Officially the Greatest show ever made
Leofwine_draca	May 4, 2021	10	Every bit as good as you've heard
dristysultana	Jun 23, 2021	10	Masterpiece

```
PlanetEarthII <- data.frame(NAME[[2]],
  Date = date_of_review[[2]],
  Rating = user_ratings[[2]],
  Title = title_of_review[[2]],
  stringsAsFactors = FALSE
)
write.csv(PlanetEarthII, "PlanetEarthII reviews.csv")
print(head(PlanetEarthII))
```

```
##      NAME..2..      Date Rating
## 1  arjanhylkema Nov 7, 2016    10
## 2      Wentloog Nov 5, 2016    10
## 3 john-m-madsen Nov 5, 2016    10
## 4 thespookybuz Nov 9, 2016    10
## 5  pjdickinson Nov 5, 2016    10
## 6      dbijis33 Nov 8, 2016    10
##
##                                     Title
## 1                                     >10
## 2                                     At once awe-inspiring and terrifying!
## 3 Yet another masterpiece from BBC Nature & David Attenborough
## 4                                     Mesmerizing
## 5                                     Astounding
## 6                                     Dangerously beautiful
```

```
PlanetEarthII %>%
  kable("latex", booktabs = TRUE) %>%
  kable_styling(latex_options = "scale_down")
```

```
PlanetEarth <- data.frame(NAME[[3]],
  Date = date_of_review[[3]],
  Rating = user_ratings[[3]],
  Title = title_of_review[[3]],
  stringsAsFactors = FALSE
)
write.csv(PlanetEarth, "PlanetEarth reviews.csv")
print(head(PlanetEarth))
```

```
##      NAME..3..      Date Rating
## 1  robert-kamer Feb 8, 2007    10
```

NAME..2..	Date	Rating	Title
arjanhylkema	Nov 7, 2016	10	>10
Wentloog	Nov 5, 2016	10	At once awe-inspiring and terrifying!
john-m-madsen	Nov 5, 2016	10	Yet another masterpiece from BBC Nature & David Attenborough
thespookybuz	Nov 9, 2016	10	Mesmerizing
pjdickinson	Nov 5, 2016	10	Astounding
dbijis33	Nov 8, 2016	10	Dangerously beautiful
dhanrajjughead	Nov 17, 2016	10	Greatest documentary ever created.
NeilBarnett	Nov 13, 2016	10	Best thing on TV since last Planet Earth
salmanu-27386	Nov 6, 2016	10	Excellent
panagiotiskatsanos	Dec 31, 2016	10	One of the best documentaries I've ever seen
ianrobo	Nov 19, 2016	10	In times of climate deniers, hope
adamonIMDb	Dec 28, 2016	7	Breathtaking
tinyfordst	May 19, 2019	10	More irritated with IMDb for the bias than with the show
BobFillmore	Sep 29, 2017	10	Should be required viewing in schools
farshidkarimi	Nov 22, 2016	10	What a Beautiful Planet- Bewitching !
TheLittleSongbird	Oct 12, 2017	10	Like the first 'Planet Earth', does for nature and our planet as 'Walking with Dinosaurs' did with the dinosaurs
myerse-165-4350	Dec 4, 2016	10	This masterpiece deserves higher scores
larask-21775	Oct 20, 2018	10	Love it!
fierceagle-40009	Apr 23, 2020	10	Absolutely amazing.
adam-whitmore	Jan 5, 2017	10	Peerless evocation of nature across the globe

```
## 2      jim-1409 Nov 19, 2008      10
## 3 ccthemoviem-1 Jan 4, 2009      10
## 4      cmcoveos Dec 15, 2006      10
## 5      Loordssm Sep 1, 2007      10
## 6      ultimorn Aug 27, 2006      10
##
##                                     Title
## 1                                     11 out of 10
## 2                                     A masterpiece of a documentary
## 3                                     In A Word: Amazing
## 4 The most amazing achievement in natural history TV has ever given
## 5                                     Simply put, stunning
## 6                                     An amazing trip around our beautiful planet.
```

```
PlanetEarth %>%
  kable("latex", booktabs = TRUE) %>%
  kable_styling(latex_options = "scale_down")
```

```
BondOfBrothers <- data.frame(NAME[[4]],
  Date = date_of_review[[4]],
  Rating = user_ratings[[4]],
  Title = title_of_review[[4]],
  stringsAsFactors = FALSE
)
write.csv(BondOfBrothers, "BondOfBrothers reviews.csv")
print(head(BondOfBrothers))
```

```
##      NAME..4..      Date Rating
## 1      Rob1331 Sep 27, 2022      10
## 2 sanderson777 Oct 14, 2001      10
## 3 wildcatt268 Jan 18, 2002      10
## 4      arjay24 Apr 18, 2004      10
## 5      rbverhoef Feb 13, 2003      10
## 6 yodaschoda Jan 23, 2005      10
##
##                                     Title
## 1                                     Incredible!!
## 2      Possibly the finest 10 hours ever created
## 3      One of the best war movies/series ever
## 4                                     Realistic
```


NAME..3..	Date	Rating	Title
robert-kamer	Feb 8, 2007	10	11 out of 10
jim-1409	Nov 19, 2008	10	A masterpiece of a documentary
ccthemoviemani-1	Jan 4, 2009	10	In A Word: Amazing
cmcoveos	Dec 15, 2006	10	The most amazing achievement in natural history TV has ever given
Loordssm	Sep 1, 2007	10	Simply put, stunning
ultimorn	Aug 27, 2006	10	An amazing trip around our beautiful planet.
bob the moo	Apr 30, 2006	10	A visually impressive and memorable look at the world that we live in
alfeu	Jun 29, 2015	9	Is it real? I mean, actual footage?
Cabrone	Jul 20, 2006	10	Beautiful
berndt65	Jan 28, 2009	10	Are you kidding me people?
planktonrules	Jun 1, 2015	7	It doesn't get any better than this.
dakuchonekobing	Oct 8, 2020	3	Only 4 Eps can touch my soul!
rooprect	Dec 4, 2007	10	Should be called "BBC - Yeah, animals suck"
bs3dc	Jan 15, 2007	10	Brilliant Documentary Series
Nerte	Jul 30, 2008	10	Explanation to those low-rating reviews...
ortz3	Dec 25, 2017	9	Truly Astonishing
solon-stewart	Sep 14, 2009	10	The Greatest Series Ever
grantss	Jan 4, 2023	10	Excellent documentary series
bellino-angelo2014	Sep 20, 2020	9	Words fail me to describe such greatness
edwardashton4545	Jul 27, 2014	10	Absolutely Mindblowing!

```
## 5                                Excellent
## 6 One of, if not the best, mini series' ever made
```

```
BondOfBrothers %>%
  kable("latex", booktabs = TRUE) %>%
  kable_styling(latex_options = "scale_down")
```

```
Chernobyl <- data.frame(NAME[[5]],
  Date = date_of_review[[5]],
  Rating = user_ratings[[5]],
  Title = title_of_review[[5]],
  stringsAsFactors = FALSE
)
write.csv(Chernobyl, "Chernobyl reviews.csv")
print(head(Chernobyl))
```

```
##      NAME..5..      Date Rating      Title
## 1 curiosityonmars May 23, 2019    10      They got it right
## 2      stelmaikh May 10, 2019    10      Goosebumps and tears
## 3   natashapekar May 9, 2019     10 I highly recommend this film!
## 4    m-porpaczi May 14, 2019    10 No hero wakes up wanting to die
## 5      Lladerat May 7, 2019     10      So far looks excellent
## 6      jfirebug May 20, 2019    10      Incredible
```

```
Chernobyl %>%
  kable("latex", booktabs = TRUE) %>%
  kable_styling(latex_options = "scale_down")
```

```
movies$year <- as.numeric(movies$year)
```

```
## Warning: NAs introduced by coercion
```

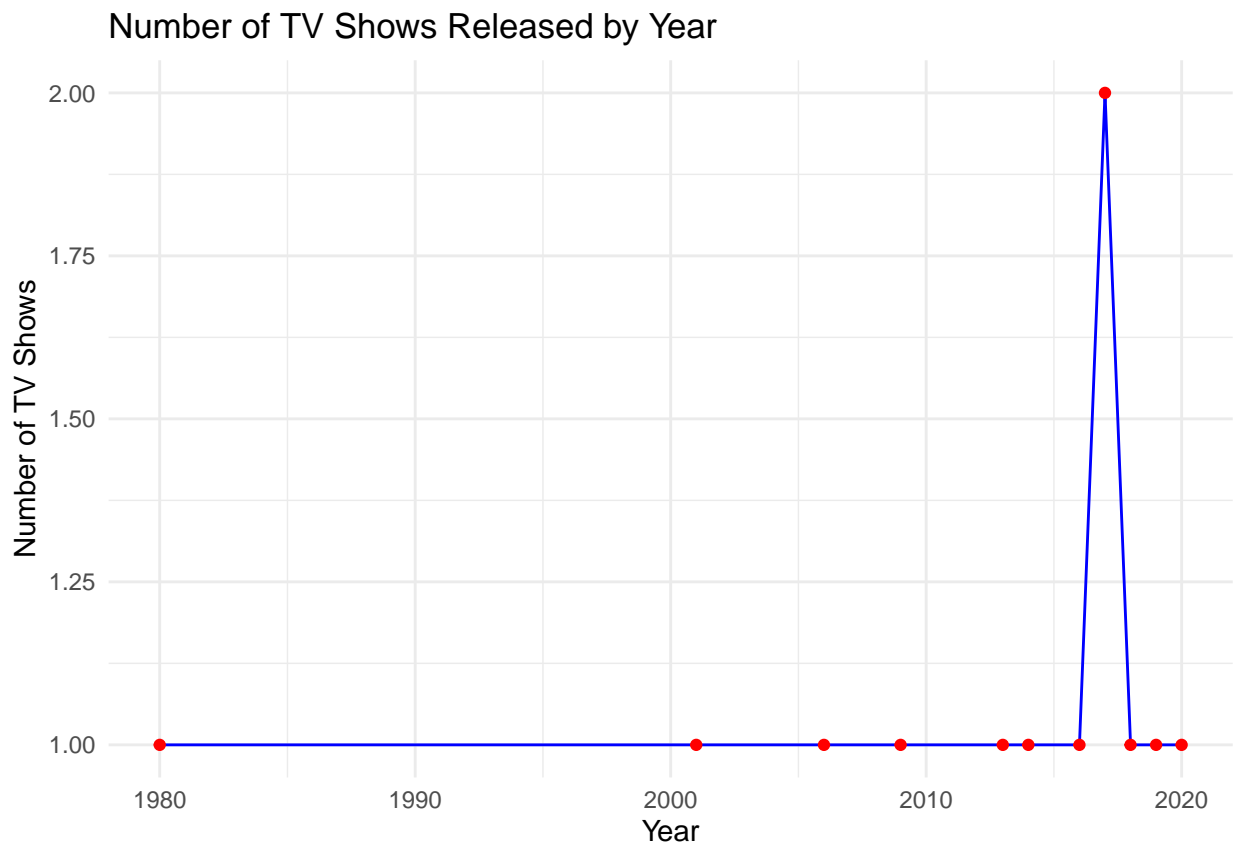
```
year_counts <- movies %>%
  filter(!is.na(year)) %>%
```

NAME..4..	Date	Rating	Title
Rob1331	Sep 27, 2022	10	Incredible!!
sanderson777	Oct 14, 2001	10	Possibly the finest 10 hours ever created
wildcatt268	Jan 18, 2002	10	One of the best war movies/series ever
arjay24	Apr 18, 2004	10	Realistic
rbverhoef	Feb 13, 2003	10	Excellent
yodaschoda	Jan 23, 2005	10	One of, if not the best, mini series' ever made
philip_vanderveken	Sep 16, 2004	10	This series is so unbelievably realistic, so authentic.
Supermanfan-13	May 6, 2022	10	One of the best mini-series ever created!
thiagoutp	Nov 4, 2019	10	Probably the best ever
bsmith5552	Nov 5, 2001	10	Realistic WWII Drama With Warts Included
faded_english_monkey	Aug 25, 2004	10	war, no frills
planktonrules	May 30, 2015	7	You can't beat this....
stilonkostrzyn	Apr 10, 2021	5	Overrated??
faded_Glory	May 2, 2006	10	Not very realistic at all
jazmodo	Jun 3, 2019	10	Without Doubt, the Best Mini-Series Ever Recorded
kait2007	Jan 26, 2005	10	Great Miniseries
mickman91-1	May 3, 2022	10	A series like this won't be made again (see below), so treasure it
kipmcmillan	Oct 24, 2018	9	Share With Your Children
erwan_ticheler	Dec 7, 2002	10	Best Mini series ever
grahamsj3	Nov 25, 2002	10	A-1, TOPS, the BOMB what else can I say?

NAME..5..	Date	Rating	Title
curiosityonmars	May 23, 2019	10	They got it right
stelmakh	May 10, 2019	10	Goosebumps and tears
natashapekar	May 9, 2019	10	I highly recommend this film!
m-porpaczi	May 14, 2019	10	No hero wakes up wanting to die
Lladerat	May 7, 2019	10	So far looks excellent
jfirebug	May 20, 2019	10	Incredible
thegldt	May 6, 2019	10	Bleak, Unsettling, Haunting All Throughout
alexander-phoenix	May 13, 2019	10	Unbelievable
wmeduardownm	May 6, 2019	10	HBO did it again!
Leofwine_draca	Nov 27, 2019	10	Exemplary
Jamie_Seaton	May 23, 2019	7	Amazing!
m-abtahi	Jan 27, 2024	1	Unveiling Human Errors and Political Shadows
piter554	Jun 29, 2019	8	How cost the lie?
frimark	May 20, 2019	10	Emotionally drained...
krzysztof-18241	May 30, 2019	10	Just watch it (!)
ahmetkozan	Jun 7, 2019	10	Now you look like the minister of coal!
stephenpdodds	May 6, 2019	9	Cracking.
Rob1331	Sep 27, 2022	9	Must Watch!
emholberg	May 26, 2019	9	It is hard to overestimate the importance of this show.
Supermanfan-13	Jul 10, 2022	10	Brilliant!

```
count(year)

ggplot(year_counts, aes(x = year, y = n)) +
  geom_line(color = "blue") +
  geom_point(color = "red") +
  labs(title = "Number of TV Shows Released by Year",
       x = "Year",
       y = "Number of TV Shows") +
  theme_minimal()
```



```
most_releases <- year_counts[which.max(year_counts$n), ]
print(most_releases)
```

```
##   year n
## 8 2017 2
```