LAB_ACTIVITY#2

Luigi Echaveria

2024-02-22

```
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie1 <- data.frame()</pre>
for (page in 1:5) {
  link1 <- paste0("https://www.imdb.com/title/tt0111161/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link1, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "The Shawshank Redemption"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie1 <- rbind(movie1, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  #Sys.sleep(1)
View(movie1)
library(dplyr)
library(rvest)
```

```
library(polite)
library(httr)
library(selectr)
movie2 <- data.frame()</pre>
for (page in 1:5) {
  link2 <- paste0("https://www.imdb.com/title/tt0068646/reviews?ref =tt urv", page)
  session1 <- bow(link2, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "The Godfather"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie2 <- rbind(movie2, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(2)
View(movie2)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie3 <- data.frame()</pre>
for (page in 1:5) {
  link3 <- paste0("https://www.imdb.com/title/tt0468569/reviews?ref_=tt_urv", page)
  session1 <- bow(link3, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
```

```
movieName <- "The Dark Knight"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie3 <- rbind(movie3, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(3)
View(movie3)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie4 <- data.frame()</pre>
for (page in 1:5) {
  link4 <- paste0("https://www.imdb.com/title/tt0068646/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link4, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  movieName <- "The Godfather Part II"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie4 <- rbind(movie4, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
```

```
date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(4)
}
View(movie4)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie5 <- data.frame()</pre>
for (page in 1:5) {
  link5 <- paste0("https://www.imdb.com/title/tt0050083/reviews?ref =tt urv", page)
  session1 <- bow(link5, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "12 Angry Men"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie5 <- rbind(movie5, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  #Sys.sleep(5)
}
View(movie5)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
```

```
movie6 <- data.frame()</pre>
for (page in 1:5) {
  link6 <- paste0("https://www.imdb.com/title/tt0108052/reviews?ref_=tt_urv", page)
  session1 <- bow(link6, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Schindler's List"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie6 <- rbind(movie6, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(6)
}
View(movie6)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie7 <- data.frame()</pre>
for (page in 1:5) {
  link7 <- paste0("https://www.imdb.com/title/tt0167260/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link7, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  movieName <- "The Lord of the Rings: The Return of the King"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
```

```
scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie7 <- rbind(movie7, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(7)
}
View(movie7)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie8 <- data.frame()</pre>
for (page in 1:5) {
  link8 <- paste0("https://www.imdb.com/title/tt1630029/reviews?ref_=tt_urv", page)
  session1 <- bow(link8, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html text(trim = TRUE)
  }
  movieName <- "Avatar: The Way of Water"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie8 <- rbind(movie8, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
```

```
))
  #Sys.sleep(8)
}
View(movie8)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie9 <- data.frame()</pre>
for (page in 1:5) {
  link9 <- paste0("https://www.imdb.com/title/tt0110912/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link9, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Pulp Fiction"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie9 <- rbind(movie9, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(9)
View(movie9)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie10 <- data.frame()</pre>
for (page in 1:5) {
```

```
link10 <- paste0("https://www.imdb.com/title/tt0120737/reviews?ref_=tt_urv", page)
  session1 <- bow(link10, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html text(trim = TRUE)
  }
  movieName <- "The Lord of the Rings: The Fellowship of the Ring"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie10 <- rbind(movie10, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(10)
View(movie10)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie11 <- data.frame()</pre>
for (page in 1:5) {
  link11 <- paste0("https://www.imdb.com/title/tt0060196/reviews?ref_=tt_urv", page)
  session1 <- bow(link11, user agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "The Good, the Bad and the Ugly"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
```

```
scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie11 <- rbind(movie11, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(11)
View(movie11)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie12 <- data.frame()</pre>
for (page in 1:5) {
  link12 <- paste0("https://www.imdb.com/title/tt0109830/reviews?ref =tt urv", page)
  session1 <- bow(link12, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Forrest Gump"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie12 <- rbind(movie12, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(12)
```

```
View(movie12)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie13 <- data.frame()</pre>
for (page in 1:5) {
  link13 <- paste0("https://www.imdb.com/title/tt0167261/reviews?ref_=tt_urv", page)
  session1 <- bow(link13, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  movieName <- "The Lord of the Rings: The Two Towers"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie13 <- rbind(movie13, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type of movie = scrapedType
  ))
  #Sys.sleep(13)
View(movie13)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie14 <- data.frame()</pre>
for (page in 1:5) {
  link14 <- paste0("https://www.imdb.com/title/tt0137523/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link14, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
```

```
scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Fight Club"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie14 <- rbind(movie14, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(14)
View(movie14)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie15 <- data.frame()</pre>
for (page in 1:5) {
  link15 <- paste0("https://www.imdb.com/title/tt1375666/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link15, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html text(trim = TRUE)
  }
  movieName <- "Inception"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie15 <- rbind(movie15, data.frame(</pre>
```

```
movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type of movie = scrapedType
  ))
 #Sys.sleep(15)
View(movie15)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie16 <- data.frame()</pre>
for (page in 1:5) {
  link16 <- paste0("https://www.imdb.com/title/tt0080684/reviews?ref_=tt_urv", page)
  session1 <- bow(link16, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Star Wars: Episode V - The Empire Strikes Back"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie16 <- rbind(movie16, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(16)
View(movie16)
library(dplyr)
```

```
library(rvest)
library(polite)
library(httr)
library(selectr)
movie17 <- data.frame()</pre>
for (page in 1:5) {
  link17 <- paste0("https://www.imdb.com/title/tt0133093/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link17, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "The Matrix"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie17 <- rbind(movie17, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(17)
View(movie17)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie18 <- data.frame()</pre>
for (page in 1:5) {
  link18 <- paste0("https://www.imdb.com/title/tt0099685/reviews?ref_=tt_urv", page)
  session1 <- bow(link18, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
```

```
}
  movieName <- "Goodfellas"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie18 <- rbind(movie18, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(18)
View(movie18)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie19 <- data.frame()</pre>
for (page in 1:5) {
  link19 <- paste0("https://www.imdb.com/title/tt0073486/reviews?ref_=tt_urv", page)
  session1 <- bow(link19, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "One Flew Over the Cuckoo's Nest"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie19 <- rbind(movie19, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
```

```
review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
#Sys.sleep(19)
View(movie19)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie20 <- data.frame()</pre>
for (page in 1:5) {
  link20 <- paste0("https://www.imdb.com/title/tt0114369/reviews?ref_=tt_urv", page)
  session1 <- bow(link20, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Se7en"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie20 <- rbind(movie20, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(20)
}
View(movie20)
library(dplyr)
library(rvest)
library(polite)
library(httr)
```

```
library(selectr)
movie21 <- data.frame()</pre>
for (page in 1:5) {
  link21 <- paste0("https://www.imdb.com/title/tt0038650/reviews?ref_=tt_urv", page)
  session1 <- bow(link21, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "It's a Wonderful Life"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie21 <- rbind(movie21, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(21)
View(movie21)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie22 <- data.frame()</pre>
for (page in 1:5) {
  link22 <- paste0("https://www.imdb.com/title/tt0816692/reviews?ref_=tt_urv", page)
  session1 <- bow(link22, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Interstellar"</pre>
```

```
scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie22 <- rbind(movie22, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(22)
View(movie22)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie23 <- data.frame()</pre>
for (page in 1:5) {
  link23 <- paste0("https://www.imdb.com/title/tt0047478/reviews?ref_=tt_urv", page)
  session1 <- bow(link23, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Seven Samurai"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie23 <- rbind(movie23, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
```

```
type_of_movie = scrapedType
  ))
  #Sys.sleep(23)
View(movie23)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie24 <- data.frame()</pre>
for (page in 1:5) {
  link24 <- paste0("https://www.imdb.com/title/tt0102926/reviews?ref_=tt_urv", page)
  session1 <- bow(link24, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "The Silence of the Lambs"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie24 <- rbind(movie24, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type of movie = scrapedType
  ))
  #Sys.sleep(24)
View(movie24)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie25 <- data.frame()</pre>
```

```
for (page in 1:5) {
  link25 <- paste0("https://www.imdb.com/title/tt0120815/reviews?ref_=tt_urv", page)
  session1 <- bow(link25, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  movieName <- "Saving Private Ryan"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie25 <- rbind(movie25, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(25)
View(movie25)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie26 <- data.frame()</pre>
for (page in 1:5) {
  link26 <- paste0("https://www.imdb.com/title/tt0317248/reviews?ref_=tt_urv", page)
  session1 <- bow(link26, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "City of God"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
```

```
scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie26 <- rbind(movie26, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(26)
}
View(movie26)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie27 <- data.frame()</pre>
for (page in 1:5) {
  link27 <- paste0("https://www.imdb.com/title/tt0118799/reviews?ref_=tt_urv", page)
  session1 <- bow(link27, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Life Is Beautiful"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie27 <- rbind(movie27, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
```

```
#Sys.sleep(27)
View(movie27)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie28 <- data.frame()</pre>
for (page in 1:5) {
  link28 <- paste0("https://www.imdb.com/title/tt0120689/reviews?ref_=tt_urv", page)
  session1 <- bow(link28, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  movieName <- "The Green Mile"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie28 <- rbind(movie28, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(28)
View(movie28)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie29 <- data.frame()</pre>
for (page in 1:5) {
  link29 <- paste0("https://www.imdb.com/title/tt0076759/reviews?ref_=tt_urv", page)
  session1 <- bow(link29, user_agent = "Educational Purpose")</pre>
```

```
scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Star Wars: Episode IV - A New Hope"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie29 <- rbind(movie29, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(29)
View(movie29)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie30 <- data.frame()</pre>
for (page in 1:5) {
  link30 <- paste0("https://www.imdb.com/title/tt0103064/reviews?ref_=tt_urv", page)
  session1 <- bow(link30, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Terminator 2: Judgment Day"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
```

```
movie30 <- rbind(movie30, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(30)
View(movie30)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie31 <- data.frame()</pre>
for (page in 1:5) {
  link31 <- paste0("https://www.imdb.com/title/tt0088763/reviews?ref_=tt_urv", page)
  session1 <- bow(link31, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Back to the Future"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie31 <- rbind(movie31, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(31)
```

```
View(movie31)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie32 <- data.frame()</pre>
for (page in 1:5) {
  link32 <- paste0("https://www.imdb.com/title/tt0088763/reviews?ref_=tt_urv", page)
  session1 <- bow(link32, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Back to the Future"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie32 <- rbind(movie32, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(32)
View(movie32)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie33 <- data.frame()</pre>
for (page in 1:5) {
  link33 <- paste0("https://www.imdb.com/title/tt0325980/reviews?ref_=tt_urv", page)
  session1 <- bow(link33, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
```

```
html nodes(selector) %>%
      html text(trim = TRUE)
  }
  movieName <- "Pirates of the Caribbean: The Curse of the Black Pearl"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie33 <- rbind(movie33, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(33)
View(movie33)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie34 <- data.frame()</pre>
for (page in 1:5) {
  link34 <- paste0("https://www.imdb.com/title/tt0383574/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link34, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Pirates of the Caribbean: Dead Man's Chest"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie34 <- rbind(movie34, data.frame(</pre>
    movie_name = movieName,
```

```
title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
   date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
 #Sys.sleep(34)
View(movie34)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie35 <- data.frame()</pre>
for (page in 1:5) {
  link35 <- paste0("https://www.imdb.com/title/tt0449088/reviews?ref_=tt_urv", page)
  session1 <- bow(link35, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Pirates of the Caribbean: At World's End"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie35 <- rbind(movie35, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(35)
}
View(movie35)
library(dplyr)
library(rvest)
```

```
library(polite)
library(httr)
library(selectr)
movie36 <- data.frame()</pre>
for (page in 1:5) {
  link36 <- paste0("https://www.imdb.com/title/tt1298650/reviews?ref =tt urv", page)
  session1 <- bow(link36, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Pirates of the Caribbean: On Stranger Tides"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie36 <- rbind(movie36, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(36)
View(movie36)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie37 <- data.frame()</pre>
for (page in 1:5) {
  link37 <- paste0("https://www.imdb.com/title/tt1790809/reviews?ref_=tt_urv", page)
  session1 <- bow(link37, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html text(trim = TRUE)
  }
```

```
movieName <- "Pirates of the Caribbean: Dead Men Tell No Tales"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie37 <- rbind(movie37, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(37)
View(movie37)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie38 <- data.frame()</pre>
for (page in 1:5) {
  link38 <- paste0("https://www.imdb.com/title/tt0241527/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link38, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  movieName <- "Harry Potter and the Sorcerer's Stone"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie38 <- rbind(movie38, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
```

```
date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(38)
View(movie38)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie39 <- data.frame()</pre>
for (page in 1:5) {
  link39 <- paste0("https://www.imdb.com/title/tt0295297/reviews?ref_=tt_urv", page)
  session1 <- bow(link39, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Harry Potter and the Chamber of Secrets"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie39 <- rbind(movie39, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(39)
View(movie39)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
```

```
movie40 <- data.frame()</pre>
for (page in 1:5) {
  link40 <- paste0("https://www.imdb.com/title/tt0304141/reviews?ref_=tt_urv", page)
  session1 <- bow(link40, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Harry Potter and the Prisoner of Azkaban"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie40 <- rbind(movie40, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(40)
View(movie40)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie41 <- data.frame()</pre>
for (page in 1:5) {
  link41 <- paste0("https://www.imdb.com/title/tt0330373/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link41, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  movieName <- "Harry Potter and the Goblet of Fire"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
```

```
scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie41 <- rbind(movie41, data.frame(</pre>
    movie name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(41)
View(movie41)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie42 <- data.frame()</pre>
for (page in 1:5) {
  link42 <- paste0("https://www.imdb.com/title/tt0373889/reviews?ref =tt urv", page)
  session1 <- bow(link42, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html text(trim = TRUE)
  }
  movieName <- "Harry Potter and the Order of the Phoenix"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie42 <- rbind(movie42, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
```

```
))
  #Sys.sleep(42)
}
View(movie42)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie43 <- data.frame()</pre>
for (page in 1:5) {
  link43 <- paste0("https://www.imdb.com/title/tt0417741/reviews?ref_=tt_urv", page)
  session1 <- bow(link43, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Harry Potter and the Half-Blood Prince"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie43 <- rbind(movie43, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(43)
View(movie43)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie44 <- data.frame()</pre>
for (page in 1:5) {
```

```
link44 <- paste0("https://www.imdb.com/title/tt0926084/reviews?ref_=tt_urv", page)
  session1 <- bow(link44, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html text(trim = TRUE)
  }
  movieName <- "Harry Potter and the Deathly Hallows: Part 1"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie44 <- rbind(movie44, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(44)
View(movie44)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie45 <- data.frame()</pre>
for (page in 1:5) {
  link45 <- paste0("https://www.imdb.com/title/tt1201607/reviews?ref =tt urv", page)
  session1 <- bow(link45, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Harry Potter and the Deathly Hallows: Part 2"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
```

```
scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie45 <- rbind(movie45, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(45)
View(movie45)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie46 <- data.frame()</pre>
for (page in 1:5) {
  link46 <- paste0("https://www.imdb.com/title/tt1049413/reviews?ref_=tt_urv", page)
  session1 <- bow(link46, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Up"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie46 <- rbind(movie46, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(46)
```

```
}
View(movie46)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie47 <- data.frame()</pre>
for (page in 1:5) {
  link47 <- paste0("https://www.imdb.com/title/tt3659388/reviews?ref_=tt_urv", page)</pre>
  session1 <- bow(link47, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "The Martian"</pre>
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie47 <- rbind(movie47, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(47)
}
View(movie47)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie48 <- data.frame()</pre>
for (page in 1:5) {
  link48 <- paste0("https://www.imdb.com/title/tt0099487/reviews?ref_=tt_urv", page)
  session1 <- bow(link48, user_agent = "Educational Purpose")</pre>
```

```
scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Edward Scissorhands"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie48 <- rbind(movie48, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(48)
View(movie48)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie49 <- data.frame()</pre>
for (page in 1:5) {
  link49 <- paste0("https://www.imdb.com/title/tt0264464/reviews?ref_=tt_urv", page)
  session1 <- bow(link49, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Catch Me If You Can"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]</pre>
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
```

```
movie49 <- rbind(movie49, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
 #Sys.sleep(49)
View(movie49)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
movie50 <- data.frame()</pre>
for (page in 1:5) {
  link50 <- paste0("https://www.imdb.com/title/tt0119654/reviews?ref =tt urv", page)
  session1 <- bow(link50, user_agent = "Educational Purpose")</pre>
  scrapeNodes <- function(selector) {</pre>
    scrape(session1) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
  movieName <- "Men in Black"
  scrapedTitle <- scrapeNodes("a.title")[1:10]</pre>
  scrapedReviewer <- scrapeNodes(".display-name-link a")[1:10]</pre>
  scrapedReview <- scrapeNodes("div.collapsable:nth-of-type(n+2) div.text")[1:10]</pre>
  scrapedDate <- scrapeNodes("span.review-date")[1:10]</pre>
  scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
  scrapedType <- scrapeNodes("Type of Movie")[1:10]</pre>
  movie50 <- rbind(movie50, data.frame(</pre>
    movie_name = movieName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_movie = scrapedType
  ))
  #Sys.sleep(50)
View(movie50)
```

```
allMovies = data.frame();
allMovies <- rbind(allMovies, movie1, movie2, movie3, movie4, movie5, movie6, movie7, movie8, movie9, m
#View(allMovies)
write.csv(allMovies, "All Reviews.csv")</pre>
```