

Lab_exercise#3

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2024-03-14

```
library(dplyr)
```

```
## Warning: package 'dplyr' was built under R version 4.3.3
```

```
##
```

```
## 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(rvest)
```

```
## Warning: package 'rvest' was built under R version 4.3.3
```

```
library(polite)
```

```
## Warning: package 'polite' was built under R version 4.3.3
```

```
library(httr)
```

```
## Warning: package 'httr' was built under R version 4.3.3
```

```
reviews <- data.frame()
```

```
link <- "https://www.imdb.com/title/tt1751634/reviews?ref_=tt_urv"
```

```
session <- bow(link, user_agent = "Educational Purpose")
```

```
scrapeNodes <- function(selector) {
```

```
  scrape(session) %>%
```

```
    html_nodes(selector) %>%
```

```
    html_text(trim = TRUE)
```

```
}
```

```

titleMovie <- scrapeNodes("a.subnav_heading")
reviewer <- scrapeNodes("span.display-name-link")[1:10]
scrapedDate <- scrapeNodes("span.review-date")[1:10]
scrapedRating <- scrapeNodes("span.rating-other-user-rating")[1:10]
scrapedReview <- scrapeNodes("div.text.show-more__control")[1:10]
scrapedTitleReview <- scrapeNodes("a.title")[1:10]

reviews <- rbind(reviews, data.frame(
  movie_title = rep(titleMovie, 10),
  reviewer_name = reviewer,
  review_date = scrapedDate,
  review_rating = scrapedRating,
  review_content = scrapedReview,
  review_title = scrapedTitleReview
))

reviews

```

```

##      movie_title      reviewer_name      review_date review_rating
## 1  The Sandman      Supermanfan-13      18 July 2023          8/10
## 2  The Sandman      DiCaprioFan1      12 December 2023          8/10
## 3  The Sandman      william-eugensson      31 August 2022          6/10
## 4  The Sandman      fraser-simons        7 August 2022          8/10
## 5  The Sandman      tinytots2      10 November 2022          6/10
## 6  The Sandman      grinningelvis      3 September 2022          6/10
## 7  The Sandman      dreadlk        16 August 2022          5/10
## 8  The Sandman      W011y4m5        5 August 2022          8/10
## 9  The Sandman      Starbuck-13        5 August 2022          8/10
## 10 The Sandman      crazelord        6 August 2022          8/10
##
## 1
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## 4
## 5
## 6 If Sandman were doing it's job, episodes 7-10 would explain why we should care about Dream and The
## 7
## 8
## 9
## 10
##
##                                     review_title
## 1                                     It's Worth Watching
## 2                                     Decent Enough
## 3                                     Great start but the show loses it's initial momentum
## 4                                     A series of two halves
## 5                                     A journey amongst dreams that flounders after an intriguing start
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## 7                                     I agree, it nosed dived after Episode 6
## 8                                     Spellbinding & visionary.
## 9                                     Entertaining but not up to the comic books perfection
## 10 Good but still limited by it being a show (no, I don't care that Constantine is a girl now).

```

```
write.csv(reviews,"reviews.csv")
```

CREATING CONNECTIONS

```
library(dplyr,dbplyr)
library(DBI)
```

```
## Warning: package 'DBI' was built under R version 4.3.3
```

```
library(RMariaDB)
```

```
## Warning: package 'RMariaDB' was built under R version 4.3.3
```

```
library(odbc)
```

```
## Warning: package 'odbc' was built under R version 4.3.3
```

```
#creating connections
connection <- dbConnect(RMariaDB::MariaDB(),
                        dsn="MariaDB-connection",
                        Server = "localhost",
                        dbname = "esmallla_2c",
                        user = "root",
                        password = "")
```

```
dbListTables(connection)
```

```
## [1] "reviews"
```

```
dbListFields(connection,"reviews")
```

```
## [1] "id"           "movie_title"  "reviewer_name" "review_date"
## [5] "review_rating" "review_content" "review_title"
```

```
review_data <- dbGetQuery(connection, "SELECT * FROM esmallla_2c.reviews")
```

```
glimpse(review_data)
```

```
## Rows: 90
## Columns: 7
## $ id          <int> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, ~
## $ movie_title <chr> "The Sandman", "The Sandman", "The Sandman", "The Sandm~
## $ reviewer_name <chr> "Supermanfan-13", "DiCaprioFan1", "william-eugensson", ~
## $ review_date  <chr> "18 July 2023", "12 December 2023", "31 August 2022", "~
## $ review_rating <chr> "8/10", "8/10", "6/10", "8/10", "6/10", "6/10", "5/10",~
## $ review_content <chr> "I have to say I enjoyed The Sandman more than I though~
## $ review_title <chr> "It's Worth Watching", "Decent Enough", "Great start bu~
```

```
### use the gsub function to replace all single quotes in the review_content and review_title columns w
## This will ensure that any single quotes in the text are properly escaped in the SQL query.
```

```
for (i in 1:nrow(reviews)) {
  query <- paste0("INSERT INTO reviews (movie_title, reviewer_name, review_date, review_rating, review_content, review_title)
VALUES ('", reviews$movie_title[i], "','", reviews$reviewer_name[i], "','", reviews$review_date[i], "','",
  gsub("'", "", reviews$review_content[i]), "','", gsub("'", "", reviews$review_title[i]), "','")")

  # execute query
  query_result <- dbSendQuery(connection, query)

  # clear result after executing query
  dbClearResult(query_result)
}
```

```
review_data <- dbGetQuery(connection, "SELECT * FROM esmallla_2c.reviews")
```

```
# VIEW REVIEWS without primary key "id"
review_data[,c(2:7)]
```

##	movie_title	reviewer_name	review_date	review_rating
## 1	The Sandman	Supermanfan-13	18 July 2023	8/10
## 2	The Sandman	DiCaprioFan1	12 December 2023	8/10
## 3	The Sandman	william-eugensson	31 August 2022	6/10
## 4	The Sandman	fraser-simons	7 August 2022	8/10
## 5	The Sandman	tinytots2	10 November 2022	6/10
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## 12	The Sandman	DiCaprioFan1	12 December 2023	8/10
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## 17	The Sandman	dreadlk	16 August 2022	5/10
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##

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```

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```


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```
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```

```
#View(review_data[,c(2:7)])
```

```
# Export to csv
```

```
write.csv(review_data[,c(2:7)], "review_data.csv")
```

```
# Close the database connection
```

```
dbDisconnect(connection)
```