LabExer1

2024-02-08

```
install.packages("rvest")
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.3'
## (as 'lib' is unspecified)
install.packages("dplyr")
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.3'
## (as 'lib' is unspecified)
install.packages("polite")
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.3'
## (as 'lib' is unspecified)
install.packages("tidyverse")
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.3'
## (as 'lib' is unspecified)
install.packages("usethis")
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.3'
## (as 'lib' is unspecified)
scrapng for whey proteins
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(polite)
library(httr)
library(dplyr)
library(polite)
library(tidyverse)
## -- Attaching core tidyverse packages -----
                                                ----- tidyverse 2.0.0 --
## v forcats 1.0.0
                                    2.1.5
                       v readr
## v ggplot2 3.4.4 v stringr 1.5.1
## v lubridate 1.9.3 v tibble 3.2.1
## v purrr 1.0.2 v tidyr
                                   1.3.1
```

```
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()
                      masks stats::lag()
## i Use the conflicted package (<a href="http://conflicted.r-lib.org/">http://conflicted.r-lib.org/</a>) to force all conflicts to become error
whey_protein_products <- data.frame()</pre>
whey_proteinlink1 = "https://www.amazon.co.uk/s?k=whey+protein+powder&crid=397T8IRAWDI8&sprefix=whey+pr
session1 <- bow(whey_proteinlink1,</pre>
           user_agent = "For Educational Purpose")
scrapeNodes <- function(selector){</pre>
scrape(session) %>%
  html_nodes(selector) %>%
  html_text(trim = TRUE)
scrapedCategory <- "Whey Protein"</pre>
scrapedName <- scrapeNodes("h2.a-size-mini.a-spacing-none.a-color-base.s-line-clamp-4")</pre>
scrapedName <- scrapedName[1:45]</pre>
scrapedPrice <- scrapeNodes("span.a-offscreen")</pre>
scrapedPrice <- scrapedPrice[1:45]</pre>
scrapedRatings <- scrapeNodes("span.a-icon-alt")</pre>
scrapedRatings <- scrapedRatings[1:45]</pre>
scrapedReviews <- scrapeNodes("span.a-size-base.s-underline-text")</pre>
scrapedReviews <- scrapedReviews[1:45]</pre>
whey_protein_products <- rbind(whey_protein_productss, data.frame(category = scrapedCategory,name = scr</pre>
                     price = scrapedPrice,
                     ratings = scrapedRatings,
                     no_of_reviews = scrapedReviews))
#----
whey_proteinlink2 = "https://www.amazon.co.uk/s?k=whey+protein+powder&page=2&crid=397T8IRAWDI8&qid=1707
session2 <- bow(whey_proteinlink2,</pre>
           user_agent = "For Educational Purpose")
scrapedCategory2 <- "Whey Protein"</pre>
scrapedName2 <- scrapeNodes("h2.a-size-mini.a-spacing-none.a-color-base.s-line-clamp-4")</pre>
scrapedName2 <- scrapedName2[1:45]</pre>
```

```
scrapedPrice2 <- scrapeNodes("span.a-offscreen")</pre>
scrapedPrice2 <- scrapedPrice2[1:45]</pre>
scrapedRatings2 <- scrapeNodes("span.a-icon-alt")</pre>
scrapedRatings2 <- scrapedRatings2[1:45]</pre>
scrapedReviews2 <- scrapeNodes("span.a-size-base.s-underline-text")</pre>
scrapedReviews2 <- scrapedReviews2[1:45]</pre>
whey_protein_products <- rbind(whey_protein_products, data.frame(category = scrapedCategory,name = scrapedCategory)</pre>
                     price = scrapedPrice,
                     ratings = scrapedRatings,
                     no_of_reviews = scrapedReviews))
#----
whey_proteinlink3 = "https://www.amazon.co.uk/s?k=whey+protein+powder&page=3&crid=397T8IRAWDI8&qid=1707
session3 <- bow(whey_proteinlink3,</pre>
           user_agent = "For Educational Purpose")
scrapedCategory3 <- "Whey Protein"</pre>
scrapedName3 <- scrapeNodes("h2.a-size-mini.a-spacing-none.a-color-base.s-line-clamp-4")</pre>
scrapedName3 <- scrapedName3[1:45]</pre>
scrapedPrice3 <- scrapeNodes("span.a-offscreen")</pre>
scrapedPrice3 <- scrapedPrice3[1:45]</pre>
scrapedRatings3 <- scrapeNodes("span.a-icon-alt")</pre>
scrapedRatings3 <- scrapedRatings3[1:45]</pre>
scrapedReviews3 <- scrapeNodes("span.a-size-base.s-underline-text")</pre>
scrapedReviews3 <- scrapedReviews3[1:45]</pre>
whey_protein_products <- rbind(whey_protein_products, data.frame(category = scrapedCategory,name = scra
                     price = scrapedPrice,
                     ratings = scrapedRatings,
                     no_of_reviews = scrapedReviews))
whey_protein_products <- whey_protein_products[1:100]</pre>
scraping for slides
##url <- "https://www.amazon.co.uk/s?k=slides&crid=38UVNRLWHLBX&sprefix=slid%2Caps%2C500&ref=nb_sb_noss
##session <- bow(url,user_agent = "For Educational Purposes")</pre>
```

```
##amazon <- read_html(url)</pre>
##slides <- scrape(session) %>%
  ##html_nodes("span.a-text-normal") %>%
  ##html text
##slides
##slides54 <- slides[2:55]
##slides54
##slides_prices <- scrape(session) %>%
  ##html_nodes("span.a-price-whole") %>%
  ##html_text
##slides_prices
##slides_Ratings <- scrape(session) %>%
  ##html_nodes("i.a-icon.a-icon-star-small.a-star-small-4.aok-align-bottom") %>%
  ##html_text
##slides_Ratings
##slides_noReviews <- scrape(session) %>%
  ##html_nodes("span.a-size-base.s-underline-text") %>%
  ##html_text
##slides noReviews
##url <- "https://www.amazon.co.uk/s?k=slides&page=2&crid=38UVNRLWHLBX&qid=1707354108&sprefix=slid%2Cap
#session <- bow(url,user_agent = "For Educational Purposes")</pre>
##amazon <- read_html(url)</pre>
##slides2 <- scrape(session) %>%
## html_nodes("span.a-text-normal") %>%
  ##html text
##slides2
##slides44 <- slides[1:44]
##slides44
##slides_prices2 <- scrape(session) %>%
## html_nodes("span.a-price-whole") %>%
## html_text
##slides_prices2
##slides_Ratings2 <- scrape(session) %>%
## html_nodes("i.a-icon.a-icon-star-small.a-star-small-4.aok-align-bottom") %>%
## html_text
##slides_Ratings2
##slides_noReviews2 <- scrape(session) %>%
## html_nodes("span.a-size-base.s-underline-text") %>%
## html_text
```

```
##slides_noReviews2
MERGING
#scraped_products <- rbind(whey_protein_products, slides)</pre>
ten products product1
library(dplyr)
library(rvest)
##
## Attaching package: 'rvest'
## The following object is masked from 'package:readr':
##
##
       guess_encoding
library(polite)
library(httr)
library(selectr)
product_1 = data.frame()
scraped_Category <- "Whey Protein"</pre>
###
  link = "https://www.amazon.co.uk/Warrior-Whey-Protein-Powder-Supplement/product-reviews/BOBWL3DGKV/re
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedprodName <- scrapedprodName[1:10]</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("a-size-baset")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating <- scrapedprodRating[1:10]</pre>
    product_1 <- rbind(product_1, data.frame(category = scraped_Category,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer,
                         review = scrapedReview,
                         date = scrapedDate,
                        ratings = scrapedprodRating))
      link_2 = "https://www.amazon.co.uk/Warrior-Whey-Protein-Powder-Supplement/product-reviews/BOBWL
sessionProd2 <- bow(link_2,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
    scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview2 <- scrapedReview2[1:10]</pre>
    scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
    scrapedDate2 <- scrapedDate2[1:10]</pre>
    scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
    product_1 <- rbind(product_1, data.frame(category = scraped_Category,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer2,
                         review = scrapedReview2,
                         date = scrapedDate2,
                        ratings = scrapedprodRating2))
    link_3 = "https://www.amazon.co.uk/Warrior-Whey-Protein-Powder-Supplement/product-reviews/BOBWL3D
sessionProd3 <- bow(link_3,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
    scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview3 <- scrapedReview3[1:10]</pre>
```

```
scrapedDate3 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate3 <- scrapedDate3[1:10]</pre>
      scrapedprodRating3 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating3 <- scrapedprodRating3[1:10]</pre>
      product_1 <- rbind(product_1, data.frame(category = scraped_Category,name = scrapedprodName,</pre>
                            reviewer = scrapedReviewer3,
                            review = scrapedReview3,
                            date = scrapedDate3,
                           ratings = scrapedprodRating3))
product2
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product_2 = data.frame()
scrapedCategory <- "Whey protein"</pre>
###
  link = "https://www.amazon.co.uk/Mutant-Extreme-Strength-High-Density-Calories/product-reviews/B09F5F
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      }
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating <- scrapedprodRating[1:10]</pre>
      product_2 <- rbind(product_2, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                          ratings = scrapedprodRating))
#----
        link 2 = "https://www.amazon.co.uk/Mutant-Extreme-Strength-High-Density-Calories/product-review
  sessionProd2 <- bow(link_2,</pre>
               user_agent = "For Educational Purpose")
      scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
      scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview2 <- scrapedReview2[1:10]</pre>
      scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate2 <- scrapedDate2[1:10]</pre>
      scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
      product_2 <- rbind(product_2, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                          ratings = scrapedprodRating2))
        link_3 = "https://www.amazon.co.uk/Mutant-Extreme-Strength-High-Density-Calories/product-review
  sessionProd2 <- bow(link 3,</pre>
               user_agent = "For Educational Purpose")
      scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
      scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview3 <- scrapedReview3[1:10]</pre>
```

```
scrapedDate3 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate3 <- scrapedDate3[1:10]</pre>
      scrapedprodRating3 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating3 <- scrapedprodRating3[1:10]</pre>
      product_2 <- rbind(product_2, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                            reviewer = scrapedReviewer3,
                            review = scrapedReview3,
                            date = scrapedDate3,
                           ratings = scrapedprodRating3))
product3
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product_3 = data.frame()
scrapedCategory <- "Whey Protein"</pre>
###
  link = "https://www.amazon.co.uk/MuscleTech-Nitro-Tech-Cookies-Cream/product-reviews/BOBRQHBWCB/ref=ci
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      }
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating <- scrapedprodRating[1:10]</pre>
      product_3 <- rbind(product_3, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                          ratings = scrapedprodRating))
#----
         link2 = "https://www.amazon.co.uk/MuscleTech-Nitro-Tech-Cookies-Cream/product-reviews/BOBRQHBW
  sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
      scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
      scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview2 <- scrapedReview2[1:10]</pre>
      scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate2 <- scrapedDate2[1:10]</pre>
      scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
      product_3 <- rbind(product_3, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                          ratings = scrapedprodRating2))
  #----
      link3 = "https://www.amazon.co.uk/MuscleTech-Nitro-Tech-Cookies-Cream/product-reviews/BOBRQHBWCB/
  sessionProd3 <- bow(link3,</pre>
               user_agent = "For Educational Purpose")
      scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
      scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
```

```
scrapedReview3 <- scrapedReview3[1:10]</pre>
      scrapedDate3 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate3 <- scrapedDate3[1:10]</pre>
      scrapedprodRating3 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating3 <- scrapedprodRating3[1:10]</pre>
      product_3 <- rbind(product_3, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                            reviewer = scrapedReviewer3,
                            review = scrapedReview3,
                            date = scrapedDate3,
                           ratings = scrapedprodRating3))
product4
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product_4 = data.frame()
scrapedCategory <- "Whey Protein"</pre>
###
  link = "https://www.amazon.co.uk/Reflex-Nutrition-Instant-Protein-Chocolate/product-reviews/B00H3IOXD
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      }
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating <- scrapedprodRating[1:10]</pre>
      product_4 <- rbind(product_4, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           review = scrapedReview,
                            date = scrapedDate,
                           ratings = scrapedprodRating))
product5
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product_5 = data.frame()
scrapedCategory <- "Whey Protein"</pre>
###
  link = "https://www.amazon.co.uk/Warrior-Workout-Extreme-Servings-Strawberry/product-reviews/B07GNJ5Q
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating <- scrapedprodRating[1:10]</pre>
    product_5 <- rbind(product_5, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer,
                         review = scrapedReview,
                         date = scrapedDate,
                        ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Warrior-Workout-Extreme-Servings-Strawberry/product-reviews/B07GNJ5
sessionProd2 <- bow(link2,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
    scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview2 <- scrapedReview2[1:10]</pre>
    scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
    scrapedDate2 <- scrapedDate2[1:10]</pre>
    scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
    product_5 <- rbind(product_5, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer2,
                         review = scrapedReview2,
                         date = scrapedDate2,
                        ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Amazon-Basics-Casebound-Notebook-21x13-3x1-6/product-reviews/B01DN8
sessionProd3 <- bow(link3,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
    scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview3 <- scrapedReview3[1:10]</pre>
```

```
scrapedDate3 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate3 <- scrapedDate3[1:10]</pre>
      scrapedprodRating3 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating3 <- scrapedprodRating3[1:10]</pre>
      product_5 <- rbind(product_5, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                            reviewer = scrapedReviewer3,
                            review = scrapedReview3,
                            date = scrapedDate3,
                           ratings = scrapedprodRating3))
product6
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product 6 = data.frame()
scraped_Category <- "Slides"</pre>
###
  link = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Slide-Sandal/product-reviews/BOCN9HD68Y/ref=
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating <- scrapedprodRating[1:10]</pre>
    product_6 <- rbind(product_6, data.frame(category = scraped_Category,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer,
                         review = scrapedReview,
                         date = scrapedDate,
                        ratings = scrapedprodRating))
      link2 = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Slide-Sandal/product-reviews/BOCN9HD6
sessionProd2 <- bow(link2,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
    scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview2 <- scrapedReview2[1:10]</pre>
    scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
    scrapedDate2 <- scrapedDate2[1:10]</pre>
    scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
    product_6 <- rbind(product_6, data.frame(category = scraped_Category ,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer2,
                         review = scrapedReview2,
                         date = scrapedDate2,
                        ratings = scrapedprodRating2))
      link3 = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Slide-Sandal/product-reviews/BOCN9HD6
sessionProd3 <- bow(link3,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
    scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview3 <- scrapedReview3[1:10]</pre>
```

```
scrapedDate3 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate3 <- scrapedDate3[1:10]</pre>
      scrapedprodRating3 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating3 <- scrapedprodRating3[1:10]</pre>
      product_6 <- rbind(product_6, data.frame(category = scraped_Category ,name = scrapedprodName,</pre>
                            reviewer = scrapedReviewer3,
                            review = scrapedReview3,
                            date = scrapedDate3,
                           ratings = scrapedprodRating3))
product7
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product_7 = data.frame()
scraped_Category <- "Slides"</pre>
  link = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Shower-Slides/product-reviews/BOCPP2PS6T/ref
      sessionProd1 <- bow(link,</pre>
               user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating <- scrapedprodRating[1:10]</pre>
    product_7 <- rbind(product_7, data.frame(category = scraped_Category,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer,
                         review = scrapedReview,
                         date = scrapedDate,
                        ratings = scrapedprodRating))
      link2 = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Shower-Slides/product-reviews/BOCPP2P
sessionProd2 <- bow(link2,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
    scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview2 <- scrapedReview2[1:10]</pre>
    scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
    scrapedDate2 <- scrapedDate2[1:10]</pre>
    scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
    product_7 <- rbind(product_7, data.frame(category = scraped_Category ,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer2,
                         review = scrapedReview2,
                         date = scrapedDate2,
                        ratings = scrapedprodRating2))
      link3 = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Shower-Slides/product-reviews/BOCPP2P
sessionProd3 <- bow(link3,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
    scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview3 <- scrapedReview3[1:10]</pre>
    scrapedDate3 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
```

```
scrapedDate3 <- scrapedDate3[1:10]</pre>
      scrapedprodRating3 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating3 <- scrapedprodRating3[1:10]</pre>
      product_7 <- rbind(product_7, data.frame(category = scraped_Category , name = scrapedprodName,</pre>
                            reviewer = scrapedReviewer3,
                            review = scrapedReview3,
                            date = scrapedDate3,
                           ratings = scrapedprodRating3))
}
product8
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product_8 = data.frame()
scraped_Category <- "Slides"</pre>
###
  link = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Slide-Sandal/product-reviews/BOCK6KTFDQ/ref=
      sessionProd1 <- bow(link,
               user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating <- scrapedprodRating[1:10]</pre>
    product_8 <- rbind(product_8, data.frame(category = scraped_Category,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer,
                         review = scrapedReview,
                         date = scrapedDate,
                        ratings = scrapedprodRating))
      link2 = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Slide-Sandal/product-reviews/BOCK6KTF
sessionProd2 <- bow(link2,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
    scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview2 <- scrapedReview2[1:10]</pre>
    scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
    scrapedDate2 <- scrapedDate2[1:10]</pre>
    scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
    product_8 <- rbind(product_8, data.frame(category = scraped_Category ,name = scrapedprodName,</pre>
                         reviewer = scrapedReviewer2,
                         review = scrapedReview2,
                         date = scrapedDate2,
                        ratings = scrapedprodRating2))
      link3 = "https://www.amazon.co.uk/adidas-Unisexs-Adilette-Slide-Sandal/product-reviews/BOCK6KTF
sessionProd3 <- bow(link3,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
    scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview3 <- scrapedReview3[1:10]</pre>
```

```
scrapedDate3 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate3 <- scrapedDate3[1:10]</pre>
      scrapedprodRating3 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating3 <- scrapedprodRating3[1:10]</pre>
      product_8 <- rbind(product_8, data.frame(category = scraped_Category ,name = scrapedprodName,</pre>
                            reviewer = scrapedReviewer3,
                            review = scrapedReview3,
                            date = scrapedDate3,
                           ratings = scrapedprodRating3))
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product_9 = data.frame()
scrapedCategory <- "Slides"</pre>
###
  link = "https://www.amazon.co.uk/Crocs-206121-Unisexs-Classic-Slide/product-reviews/BOCRJGKXJG/ref=cm
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html nodes(selector) %>%
        html_text(trim = TRUE)
      }
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
      scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
```

```
scrapedprodRating <- scrapedprodRating[1:10]</pre>
    product_9 <- rbind(product_9, data.frame(category = scrapedCategory,</pre>
                          reviewer = scrapedReviewer,
                         review = scrapedReview,
                         date = scrapedDate,
                         ratings = scrapedprodRating))
     link2 = "https://www.amazon.co.uk/Crocs-206121-Unisexs-Classic-Slide/product-reviews/BOCRJGKXJG/
sessionProd2 <- bow(link2,</pre>
              user_agent = "For Educational Purpose")
    scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
    scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview2 <- scrapedReview2[1:10]</pre>
    scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
    scrapedDate2 <- scrapedDate2[1:10]</pre>
    scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
    product_9 <- rbind(product_9, data.frame(category = scrapedCategory,</pre>
                         reviewer = scrapedReviewer2,
                         review = scrapedReview2,
                         date = scrapedDate2,
                         ratings = scrapedprodRating2))
     link3 = "https://www.amazon.co.uk/Crocs-206121-Unisexs-Classic-Slide/product-reviews/BOCRJGKXJG/
sessionProd3 <- bow(link3,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
    scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview3 <- scrapedReview3[1:10]</pre>
    scrapedDate3 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
    scrapedDate3 <- scrapedDate3[1:10]</pre>
```

```
scrapedprodRating3 <- scrapeNodes("span.a-icon-alt")</pre>
      scrapedprodRating3 <- scrapedprodRating3[1:10]</pre>
      product_9 <- rbind(product_9,</pre>
                           data.frame(category = scrapedCategory,
                            reviewer = scrapedReviewer3,
                            review = scrapedReview3,
                            date = scrapedDate3,
                           ratings = scrapedprodRating3))
product10
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
product_10 = data.frame()
scrapedCategory <- "Slides"</pre>
###
  link = "https://www.amazon.co.uk/Under-Armour-Locker-Slide-Walking/product-reviews/B087DT44PC/ref=cm_
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      amazon <- read_html(link)</pre>
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
      scrapedprodName <- scrapeNodes("h1.a-size-large.a-text-ellipsis")</pre>
      scrapedprodName <- scrapeNodes[1:10]</pre>
      scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
      scrapedReviewer <- scrapedReviewer[1:10]</pre>
      scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
      scrapedReview <- scrapedReview[1:10]</pre>
      scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
      scrapedDate <- scrapedDate[1:10]</pre>
```

```
scrapedprodRating <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating <- scrapedprodRating[1:10]</pre>
    product_10 <- rbind(product_10, data.frame(category = scrapedCategory,</pre>
                         reviewer = scrapedReviewer,
                         review = scrapedReview,
                         date = scrapedDate,
                         ratings = scrapedprodRating))
     link2 = "https://www.amazon.co.uk/Under-Armour-Locker-Slide-Walking/product-reviews/B087DT44PC/r
sessionProd2 <- bow(link2,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
    scrapedReview2 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview2 <- scrapedReview2[1:10]</pre>
    scrapedDate2 <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")</pre>
    scrapedDate2 <- scrapedDate2[1:10]</pre>
    scrapedprodRating2 <- scrapeNodes("span.a-icon-alt")</pre>
    scrapedprodRating2 <- scrapedprodRating2[1:10]</pre>
    product_10 <- rbind(product_10, data.frame(category = scrapedCategory,</pre>
                         reviewer = scrapedReviewer2,
                         review = scrapedReview2,
                         date = scrapedDate2,
                         ratings = scrapedprodRating2))
       link3 = "https://www.amazon.co.uk/Under-Armour-Locker-Slide-Walking/product-reviews/B087DT44PC
sessionProd3 <- bow(link3,</pre>
             user_agent = "For Educational Purpose")
    scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
    scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
    scrapedReview3 <- scrapeNodes("span.a-size-base.review-text.review-text-content")</pre>
    scrapedReview3 <- scrapedReview3[1:10]</pre>
```