Lab Exercise 1

Ann Margaret Camayodo

2024-02-8

```
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(rvest)
library(polite)
library(httr)
#First Page: 40 Products of Shampoo
shampoo_product <- data.frame()</pre>
shampooLink1 = "https://www.amazon.co.uk/s?k=shampoo&ref=nb_sb_noss"
session1 <- html_session(shampooLink1,</pre>
           user_agent = "For Educational Purpose")
## Warning: `html_session()` was deprecated in rvest 1.0.0.
## i Please use `session()` instead.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
scrapeNodes <- function(session, selector){</pre>
  session %>%
    html_nodes(selector) %>%
    html_text
}
scrapedCategory <- "Shampoo"</pre>
scrapedName <- scrapeNodes(session1, "span.a-text-normal")</pre>
scrapedName <- scrapedName[2:41]</pre>
scrapedPrice <- scrapeNodes(session1, "span.a-offscreen")</pre>
scrapedPrice <- scrapedPrice[2:41]</pre>
```

```
scrapedPrice
  [1] "£0.36" "£10.75" "£3.57" "£0.40" "£5.40" "£3.60" "£0.94" "£6.29"
   [9] "£3.60" "£0.94" "£6.29" "£3.60" "£0.94" "£6.29" "£13.31" "£0.89"
## [17] "£14.58" "£3.75" "£1.50" "£1.80" "£0.45" "£21.85" "£2.19" "£28.00"
## [25] "£23.33" "£7.78" "£8.99" "£0.75" "£13.50" "£8.10" "£0.45" "£16.20"
## [33] "£5.40" "£25.15" "£2.52" "£26.42" "£18.90" "£7.11" "£22.23" "£19.04"
scrapedRatings <- scrapeNodes(session1, "span.a-icon-alt")</pre>
scrapedRatings <- scrapedRatings[2:41]</pre>
scrapedReviews <- scrapeNodes(session1, "span.a-size-base.s-underline-text")</pre>
scrapedReviews <- scrapedReviews[2:41]</pre>
shampoo_product <- rbind(shampoo_product, data.frame(category = scrapedCategory, Name = scrapedName,</pre>
                                                         Price = scrapedPrice,
                                                         Ratings = scrapedRatings,
                                                         No_Of_Reviews = scrapedReviews))
#Second Page: 40 Products of Shampoo
shampooLink2 = "https://www.amazon.co.uk/s?k=shampoo&page=2&qid=1707542630&ref=sr_pg_1"
session1 <- html_session(shampooLink2,</pre>
           user agent = "For Educational Purpose")
scrapeNodes <- function(session, selector){</pre>
  session %>%
    html nodes(selector) %>%
    html_text
}
scrapedCategory <- "Shampoo"</pre>
scrapedName <- scrapeNodes(session1, "span.a-text-normal")</pre>
scrapedName <- scrapedName[2:41]</pre>
scrapedPrice <- scrapeNodes(session1, "span.a-offscreen")</pre>
scrapedPrice <- scrapedPrice[2:41]</pre>
scrapedPrice
## [1] "£1.52" "£10.82" "£6.75" "£0.68" "£11.70" "£14.67" "£4.89" "£17.64"
## [9] "£14.00" "£2.80" "£6.29" "£1.77" "£4.03" "£18.00" "£0.72" "£27.00"
## [17] "£7.48" "£0.75" "£10.79" "£2.28" "£13.84" "£1.38" "£23.06" "£8.95"
                 "£18.45" "£13.61" "£0.91" "£26.96" "£0.98" "£0.39" "£3.15"
## [25] "£1.19"
## [33] "£0.46" "£6.29" "£12.99" "£2.65" "£16.65" "£17.18" "£4.30" "£5.69"
scrapedRatings <- scrapeNodes(session1, "span.a-icon-alt")</pre>
scrapedRatings <- scrapedRatings[2:41]</pre>
scrapedReviews <- scrapeNodes(session1, "span.a-size-base.s-underline-text")</pre>
scrapedReviews <- scrapedReviews[2:41]</pre>
shampoo_product <- rbind(shampoo_product, data.frame(category = scrapedCategory, Name = scrapedName,</pre>
```

```
Price = scrapedPrice,
                                                         Ratings = scrapedRatings,
                                                         No Of Reviews = scrapedReviews))
#Third Page: 40 Products of Shampoo
shampooLink3 = "https://www.amazon.co.uk/s?k=shampoo&page=3&qid=1707544226&ref=sr pg 2"
session1 <- html_session(shampooLink3,</pre>
           user_agent = "For Educational Purpose")
scrapeNodes <- function(session, selector){</pre>
  session %>%
    html nodes(selector) %>%
    html_text
}
scrapedCategory <- "Shampoo"</pre>
scrapedName <- scrapeNodes(session1, "span.a-text-normal")</pre>
scrapedName <- scrapedName[2:41]</pre>
scrapedPrice <- scrapeNodes(session1, "span.a-offscreen")</pre>
scrapedPrice <- scrapedPrice[2:41]</pre>
scrapedPrice
## [1] "£1.87" "£14.91" "£3.73" "£19.91" "£4.77" "£1.24" "£7.64" "£1.80"
## [9] "£0.60" "£2.25" "£4.96" "£1.24" "£5.57" "£3.21" "£0.64" "£8.99"
## [17] "£3.59" "£1.24" "£5.40" "£21.52" "£0.86" "£27.00" "£9.98" "£3.99"
## [25] "£12.00" "£4.04" "£1.62" "£0.85" "£14.81" "£2.96" "£17.19" "£24.96"
## [33] "£1.66" "£6.30" "£2.52" "£16.20" "£0.40" "£32.40" "£8.52" "£1.74"
scrapedRatings <- scrapeNodes(session1, "span.a-icon-alt")</pre>
scrapedRatings <- scrapedRatings[2:41]</pre>
scrapedReviews <- scrapeNodes(session1, "span.a-size-base.s-underline-text")</pre>
scrapedReviews <- scrapedReviews[2:41]</pre>
shampoo product <- rbind(shampoo product, data.frame(category = scrapedCategory, Name = scrapedName,</pre>
                                                         Price = scrapedPrice,
                                                         Ratings = scrapedRatings,
                                                         No_Of_Reviews = scrapedReviews))
shampoo_product <- shampoo_product[1:100,]</pre>
#View(shampoo_product)
library(dplyr)
library(rvest)
```

```
library(polite)
library(httr)
#First Page: 40 Products of Conditioner
conditioner_product <- data.frame()</pre>
conditionerLink1 = "https://www.amazon.co.uk/s?k=conditioner&crid=2CK7VDNTQEPNT&sprefix=condition%2Caps"
session1 <- html_session(conditionerLink1,</pre>
           user_agent = "For Educational Purpose")
scrapeNodes <- function(session, selector){</pre>
  session %>%
    html_nodes(selector) %>%
    html_text
}
scrapedCategory <- "Conditioner"</pre>
scrapedName <- scrapeNodes(session1, "span.a-text-normal")</pre>
scrapedName <- scrapedName[2:41]</pre>
scrapedPrice <- scrapeNodes(session1, "span.a-offscreen")</pre>
scrapedPrice <- scrapedPrice[2:41]</pre>
scrapedPrice
## [1] "£0.40" "£5.40" "£0.98" "£0.39" "£3.60" "£0.94" "£6.74" "£4.77"
## [9] "£1.24" "£7.64" "£20.39" "£6.80" "£21.46" "£18.30" "£6.10" "£18.90"
## [17] "£9.82" "£0.98" "£16.20" "£0.90" "£0.36" "£2.25" "£18.90" "£1.89"
## [25] "£15.39" "£5.79" "£25.02" "£16.89" "£1.69" "£0.98" "£0.39" "£6.92"
## [33] "£2.04" "£9.00" "£19.50" "£1.95" "£23.33" "£9.49" "£0.95" "£5.39"
scrapedRatings <- scrapeNodes(session1, "span.a-icon-alt")</pre>
scrapedRatings <- scrapedRatings[2:41]</pre>
scrapedReviews <- scrapeNodes(session1, "span.a-size-base.s-underline-text")</pre>
scrapedReviews <- scrapedReviews[2:41]</pre>
conditioner_product <- rbind(conditioner_product, data.frame(category = scrapedCategory, Name = scrapedN</pre>
                                                         Price = scrapedPrice,
                                                         Ratings = scrapedRatings,
                                                         No_Of_Reviews = scrapedReviews))
#Second Page: 40 Products of Conditioner
conditionerLink2 = "https://www.amazon.co.uk/s?k=conditioner&page=2&crid=2CK7VDNTQEPNT&qid=1707544332&s
session1 <- html_session(conditionerLink2,</pre>
           user_agent = "For Educational Purpose")
scrapeNodes <- function(session, selector){</pre>
 session %>%
```

```
html_nodes(selector) %>%
    html_text
}
scrapedCategory <- "Conditioner"</pre>
scrapedName <- scrapeNodes(session1, "span.a-text-normal")</pre>
scrapedName <- scrapedName[2:41]</pre>
scrapedPrice <- scrapeNodes(session1, "span.a-offscreen")</pre>
scrapedPrice <- scrapedPrice[2:41]</pre>
scrapedPrice
## [1] "£2.61" "£6.66" "£6.66" "£19.95" "£19.95" "£8.33" "£1.11" "£26.21"
## [9] "£9.23" "£1.23" "£28.95" "£18.83" "£7.53" "£28.00" "£4.05" "£1.47"
## [17] "£4.50" "£19.03" "£7.61" "£14.39" "£7.20" "£16.63" "£17.99" "£6.76"
## [25] "£25.02" "£4.18" "£1.67" "£6.29" "£5.40" "£2.70" "£6.75" "£9.95"
## [33] "£1.33" "£5.27" "£2.11" "£5.99" "£13.82" "£6.91" "£14.97" "£9.32"
scrapedRatings <- scrapeNodes(session1, "span.a-icon-alt")</pre>
scrapedRatings <- scrapedRatings[2:41]</pre>
scrapedReviews <- scrapeNodes(session1, "span.a-size-base.s-underline-text")</pre>
scrapedReviews <- scrapedReviews[2:41]</pre>
conditioner_product <- rbind(conditioner_product, data.frame(category = scrapedCategory, Name = scrapedN</pre>
                                                          Price = scrapedPrice,
                                                          Ratings = scrapedRatings,
                                                          No Of Reviews = scrapedReviews))
#Third Page: 40 Products of Conditioner
conditionerLink3 = "https://www.amazon.co.uk/s?k=conditioner&page=3&crid=2CK7VDNTQEPNT&qid=1707544352&s
session1 <- html_session(conditionerLink3,</pre>
           user_agent = "For Educational Purpose")
scrapeNodes <- function(session, selector){</pre>
  session %>%
    html_nodes(selector) %>%
    html_text
}
scrapedCategory <- "Conditioner"</pre>
scrapedName <- scrapeNodes(session1, "span.a-text-normal")</pre>
scrapedName <- scrapedName[2:41]</pre>
scrapedPrice <- scrapeNodes(session1, "span.a-offscreen")</pre>
scrapedPrice <- scrapedPrice[2:41]</pre>
scrapedPrice
```

```
## [1] "£1.40" "£8.09" "£13.04" "£6.52" "£15.97" "£7.79" "£1.81" "£11.69"
## [9] "£7.19" "£2.40" "£10.82" "£5.41" "£42.08" "£4.21" "£23.81" "£2.38"
## [17] "£30.00" "£4.04" "£1.62" "£6.59" "£1.72" "£9.89" "£9.99" "£4.00"
## [25] "£16.95" "£5.65" "£2.26" "£7.19" "£4.04" "£1.01" "£8.09" "£3.14"
## [33] "£0.46" "£6.29" "£0.85" "£0.24" "£1.07" "£3.60" "£0.94" "£6.29"
scrapedRatings <- scrapeNodes(session1, "span.a-icon-alt")</pre>
scrapedRatings <- scrapedRatings[2:41]</pre>
scrapedReviews <- scrapeNodes(session1, "span.a-size-base.s-underline-text")</pre>
scrapedReviews <- scrapedReviews[2:41]</pre>
conditioner_product <- rbind(conditioner_product, data.frame(category = scrapedCategory, Name = scrapedN</pre>
                                                         Price = scrapedPrice,
                                                         Ratings = scrapedRatings,
                                                         No_Of_Reviews = scrapedReviews))
conditioner_product <- conditioner_product[1:100,]</pre>
#View(conditioner_product)
shampoo_conditioner_Scraped <- rbind(shampoo_product, conditioner_product)</pre>
#View(shampoo_conditioner_Scraped)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct1 = data.frame()
scrapedCategory <- "Shampoo"</pre>
link = "https://www.amazon.co.uk/Jamaican-Black-Castor-Shampoo-355ml/dp/B08BZNPNHX/ref=sr 1 1?keywords=
      sessionProd1 <- bow(link,
               user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
                AS I AM Jamaican Black Castor Oil Shampoo, 355ml
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct1 <- rbind(amazonProduct1, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                          ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Jamaican-Black-Castor-Shampoo-355ml/product-reviews/B08BZNPNHX/ref=cm
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct1 <- rbind(amazonProduct1, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                            date = scrapedDate2,
                          ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Jamaican-Black-Castor-Shampoo-355ml/product-reviews/B08BZNPNHX/ref=cm
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct1 <- rbind(amazonProduct1, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct1)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct2 = data.frame()
scrapedCategory <- "Shampoo"</pre>
link = "https://www.amazon.co.uk/Faith-Nature-Lavender-Geranium-Soothing/dp/B002MMSAVU/ref=sr 1 2?keywo
      sessionProd1 <- bow(link,</pre>
               user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 Faith In Nature Natural Lavender & Geranium Shampoo, Soothing, Vegan & Cruelty Free, No
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct2 <- rbind(amazonProduct2, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                           ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Faith-Nature-Lavender-Geranium-Soothing/dp/B002MMSAVU/ref=sr_1_2?keyw
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct2 <- rbind(amazonProduct2, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                           ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Faith-Nature-Lavender-Geranium-Soothing/dp/B002MMSAVU/ref=sr_1_2?keyw
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct2 <- rbind(amazonProduct2, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct2)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct3 = data.frame()
scrapedCategory <- "Shampoo"</pre>
link = "https://www.amazon.co.uk/Head-Shoulders-Classic-Dandruff-Conditioner/dp/B00QPR0Y9U/ref=sr 1 7?k
      sessionProd1 <- bow(link,</pre>
               user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 Head & Shoulders Classic Clean 2in1 Anti Dandruff Shampoo, 1000ml. Up to 100% Flake Fre
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct3 <- rbind(amazonProduct3, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                           ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Head-Shoulders-Classic-Dandruff-Conditioner/dp/B00QPR0Y9U/ref=sr_1_7?
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct3 <- rbind(amazonProduct3, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                           ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Head-Shoulders-Classic-Dandruff-Conditioner/dp/B00QPR0Y9U/ref=sr_1_7?
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct3 <- rbind(amazonProduct3, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct3)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct4 = data.frame()
scrapedCategory <- "Shampoo"</pre>
link = "https://www.amazon.co.uk/LOreal-Paris-Elvive-Protect-Shampoo/dp/B00PIM3IU4/ref=sr 1 6?keywords=
      sessionProd1 <- bow(link,</pre>
               user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 Elvive Haircare L'Oreal Paris Elvive Colour Protect Shampoo 400ml - Pack of 6
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct4 <- rbind(amazonProduct4, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                           ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/LOreal-Paris-Elvive-Protect-Shampoo/dp/B00PIM3IU4/ref=sr_1_6?keywords
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct4 <- rbind(amazonProduct4, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                           ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/LOreal-Paris-Elvive-Protect-Shampoo/dp/B00PIM3IU4/ref=sr_1_6?keywords
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct4 <- rbind(amazonProduct4, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct4)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct5 = data.frame()
scrapedCategory <- "Shampoo"</pre>
link = "https://www.amazon.co.uk/Pantene-Shampoo-Damaged-Promote-Packaging/dp/BOBKLH6D8Y/ref=sr_1_11?ke
      sessionProd1 <- bow(link,</pre>
               user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 Pantene Grow Strong Shampoo with Biotin and Bamboo, 11. Helps Promote Hair Growth and R
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct5 <- rbind(amazonProduct5, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                           ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Pantene-Shampoo-Damaged-Promote-Packaging/dp/B0BKLH6D8Y/ref=sr_1_11?k
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct5 <- rbind(amazonProduct5, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                           ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Pantene-Shampoo-Damaged-Promote-Packaging/dp/B0BKLH6D8Y/ref=sr_1_11?k
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct5 <- rbind(amazonProduct5, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct5)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct6 = data.frame()
scrapedCategory <- "Conditioner"</pre>
link = "https://www.amazon.co.uk/Garnier-Ultimate-Blends-Banana-Treatment/dp/B07L5WGS2X/ref=sr 1 1?crid
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 Garnier Hair Food Multi-use Hair Treatment Mask, Nourishes and Conditions, Ideal for Dr
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct6 <- rbind(amazonProduct6, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                           ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Garnier-Ultimate-Blends-Banana-Treatment/dp/B07L5WGS2X/ref=sr_1_1?cri
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct6 <- rbind(amazonProduct6, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                           ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Garnier-Ultimate-Blends-Banana-Treatment/dp/B07L5WGS2X/ref=sr_1_1?cri
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct6 <- rbind(amazonProduct6, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct6)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct7 = data.frame()
scrapedCategory <- "Conditioner"</pre>
link = "https://www.amazon.co.uk/TRESemme-Moisture-Rich-Conditioner-900/dp/B08Q15C2FB/ref=sr 1 5?crid=2
      sessionProd1 <- bow(link,</pre>
               user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 TRESemmé Moisture Rich Conditioner with vitamin E for dry, damaged hair 900 ml
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct7 <- rbind(amazonProduct7, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                           ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/TRESemme-Moisture-Rich-Conditioner-900/dp/B08Q15C2FB/ref=sr_1_5?crid=
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct7 <- rbind(amazonProduct7, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                           ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/TRESemme-Moisture-Rich-Conditioner-900/dp/B08Q15C2FB/ref=sr_1_5?crid=
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct7 <- rbind(amazonProduct7, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct7)
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct8 = data.frame()
scrapedCategory <- "Conditioner"</pre>
link = "https://www.amazon.co.uk/Dove-Intensive-Repair-Conditioner-200ml/dp/B014G2WYKQ/ref=sr 1 23?crid
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 Dove Nutritive Solutions Intensive Repair Conditioner 200ml
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct8 <- rbind(amazonProduct8, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                           ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Dove-Intensive-Repair-Conditioner-200ml/dp/B014G2WYKQ/ref=sr_1_23?cri
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct8 <- rbind(amazonProduct8, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                           ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Dove-Intensive-Repair-Conditioner-200ml/dp/B014G2WYKQ/ref=sr_1_23?cri
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct8 <- rbind(amazonProduct8, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct8)
9
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct9 = data.frame()
scrapedCategory <- "Conditioner"</pre>
link = "https://www.amazon.co.uk/Schwarzkopf-Professional-Bonacure-Freeze-Conditioner/dp/B07CJGC1B4/ref
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 Schwarzkopf Professional Bonacure Color Freeze Conditioner pH 4.5, 1000 ml
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct9 <- rbind(amazonProduct9, data.frame(category = scrapedCategory,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                           ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Schwarzkopf-Professional-Bonacure-Freeze-Conditioner/dp/B07CJGC1B4/re
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct9 <- rbind(amazonProduct9, data.frame(category = scrapedCategory ,name = scrapedprodName,</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                           ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Schwarzkopf-Professional-Bonacure-Freeze-Conditioner/dp/B07CJGC1B4/re
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct9 <- rbind(amazonProduct9, data.frame(category = scrapedCategory, name = scrapedprodName,
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct9)
10
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)
amazonProduct10 = data.frame()
scrapedCategory <- "Conditioner"</pre>
link = "https://www.amazon.co.uk/Redken-Conditioner-Argan-Intense-Softness/dp/B08XZ3N752/ref=sr 1 29?cr
      sessionProd1 <- bow(link,</pre>
                user_agent = "For Educational Purpose")
      scrapeNodes <- function(selector){</pre>
      scrape(sessionProd1) %>%
        html_nodes(selector) %>%
        html_text
scrapedprodName <- scrapeNodes("span.a-size-large.product-title-word-break")</pre>
scrapedprodName
## [1] "
                 REDKEN Conditioner, For Dry Hair, Argan Oil, Intense Softness and Shine, All Soft
scrapedReviewer <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer <- scrapedReviewer[1:10]</pre>
```

```
scrapedReview <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial-</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>
amazonProduct10 <- rbind(amazonProduct10, data.frame(category = scrapedCategory,name = scrapedprodName,
                           reviewer = scrapedReviewer,
                           review = scrapedReview,
                           date = scrapedDate,
                          ratings = scrapedprodRating))
link2 = "https://www.amazon.co.uk/Redken-Conditioner-Argan-Intense-Softness/dp/B08XZ3N752/ref=sr_1_29?c
sessionProd2 <- bow(link2,</pre>
               user_agent = "For Educational Purpose")
scrapedReviewer2 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer2 <- scrapedReviewer2[1:10]</pre>
scrapedReview2 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial</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>
amazonProduct10 <- rbind(amazonProduct10, data.frame(category = scrapedCategory, name = scrapedprodName</pre>
                           reviewer = scrapedReviewer2,
                           review = scrapedReview2,
                           date = scrapedDate2,
                          ratings = scrapedprodRating2))
link3 = "https://www.amazon.co.uk/Redken-Conditioner-Argan-Intense-Softness/dp/B08XZ3N752/ref=sr_1_29?c
sessionProd3 <- bow(link3,</pre>
                user_agent = "For Educational Purpose")
```

```
scrapedReviewer3 <- scrapeNodes("span.a-profile-name")</pre>
scrapedReviewer3 <- scrapedReviewer3[1:10]</pre>
scrapedReview3 <- scrapeNodes("div.a-expander-content.reviewText.review-text-content.a-expander-partial
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>
amazonProduct10 <- rbind(amazonProduct10, data.frame(category = scrapedCategory, name = scrapedprodName
                           reviewer = scrapedReviewer3,
                           review = scrapedReview3,
                           date = scrapedDate3,
                          ratings = scrapedprodRating3))
#View(amazonProduct10)
shampoo_conditioner_Amazon <- rbind(amazonProduct1, amazonProduct2, amazonProduct3, amazonProduct4, ama
#View(shampoo_conditioner_Amazon)
write.csv(shampoo_conditioner_Amazon, "shampoo_conditioner.csv")
save(scrape, file = "shampoo_conditioner_Amazon.RData")
```