

lab_exercise#2_Olivo

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SCRAPING FOR 50

product1 - STAEDTLER 121-2 BK5D Noris School Graphite Pencils - HB Degree (Pack of 5), Black

```
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)
```

```
library(selectr)
```

```
product1 <- data.frame()
```

```
for (page in 1:5) {
```

```
  link1 <- paste0("https://www.amazon.com.au/HB-Pack-Staedtler-Pencil-Blister/product-reviews/B001P5V47V")
```

```
  session1 <- bow(link1, user_agent = "Educational Purpose")
```

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

```
    scrape(session1) %>%
```

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

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

```
  }
```

```
  productName <- "STAEDTLER 121-2 BK5D Noris School Graphite Pencils - HB Degree (Pack of 5), Black"
```

```
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
```

```
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
```

```
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
```

```
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
```

```
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
```

```
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]
```

```
  product1 <- rbind(product1, data.frame(
```

```
    prod_name = productName,
```

```
    title = scrapedTitle,
```

```

    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product1)

```

product2 - STAEDTLER NORIS SCHOOL PENCILS HB [PACK OF 50) LOOSE

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product2 <- data.frame()

for (page in 1:5) {
  link2 <- paste0("https://www.amazon.com.au/STAEDTLER-Noris-School-Pencils-Loose/product-reviews/B00Z7")
  session2 <- bow(link2, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session2) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "STAEDTLER NORIS SCHOOL PENCILS HB [PACK OF 50) LOOSE"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product2 <- rbind(product2, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product2)

```

product3 - BIC Evolution Original Pencils - Pack of 10 - All-Purpose, Extra- Resistant Erasable Pencils for Easy Drawing and Writing, black

```
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product3 <- data.frame()

for (page in 1:5) {
  link3 <- paste0("https://www.amazon.com.au/BIC-Evolution-Original-Graphite-Pencils/product-reviews/B000000000")
  session3 <- bow(link3, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session3) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "BIC Evolution Original Pencils - Pack of 10 - All-Purpose, Extra- Resistant Erasable Pencils for Easy Drawing and Writing, black"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-base")
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product3 <- rbind(product3, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product3)
```

product4 - BIC Cristal Original Ballpoint , Comfortable Biro Pens, Medium Point (1.0mm), Assorted Colours, Pack of 10

```
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product4 <- data.frame()
```

```

for (page in 1:5) {
  link4 <- paste0("https://www.amazon.com.au/Cristal-Original-Ballpoint-Medium-Point/product-reviews/B00
  session4 <- bow(link4, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session4) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "BIC Cristal Original Ballpoint , Comfortable Biro Pens, Medium Point (1.0mm), Assorted
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product4 <- rbind(product4, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product4)

```

product5 - BIC Evolution Graphite Pencils - Box of 12 - HB Lead with Colourful Striped Design - Wood-Free and Splinter-Proof, Yellow,Green,Pink,Red,Black

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product5 <- data.frame()

for (page in 1:5) {
  link5 <- paste0("https://www.amazon.com.au/BIC-Evolution-Colourful-Graphite-Pencil/product-reviews/B00
  session5 <- bow(link5, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session5) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }
}

```

```

productName <- "BIC Evolution Graphite Pencils - Box of 12 - HB Lead with Colourful Striped Design - V
scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b
scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

product5 <- rbind(product5, data.frame(
  prod_name = productName,
  title = scrapedTitle,
  reviewer = scrapedReviewer,
  review = scrapedReview,
  date = scrapedDate,
  ratings = scrapedRating,
  type_of_purchase = scrapedType
))

Sys.sleep(3)
}

#View(product5)

```

product6 - Faber-Castell TK-Fine-9760 Mechanical Pencils Wallet of 3 - 0.35, 0.5, 0.7mm, Green

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product6 <- data.frame()

for (page in 3:7) {
  link6 <- paste0("https://www.amazon.com.au/Faber-Castell-TK-Fine-9713-Mechanical-Pencils-Wallet/produ
  session6 <- bow(link6, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session6) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Faber-Castell TK-Fine-9760 Mechanical Pencils Wallet of 3 - 0.35, 0.5, 0.7mm, Green"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product6 <- rbind(product6, data.frame(
    prod_name = productName,
    title = scrapedTitle,

```

```

    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product6)

```

product7 - STAEDTLER 120-0 Noris Graphite Pencils - 2B (Box of 12), Black

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product7 <- data.frame()

for (page in 3:7) {
  link7 <- paste0("https://www.amazon.com.au/Staedtler-120-0-Noris-Pencils-Black/product-reviews/B0018L")
  session7 <- bow(link7, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session7) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "STAEDTLER 120-0 Noris Graphite Pencils - 2B (Box of 12), Black"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product7 <- rbind(product7, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product7)

```

product8 - STAEDTLER 100B G6 Mars Lumograph Pencils, Black, Pack of 6

```
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product8 <- data.frame()

for (page in 3:7) {
  link8 <- paste0("https://www.amazon.com.au/STAEDTLER-100B-G6-Lumograph-Pencils/product-reviews/B018W0L")
  session8 <- bow(link8, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session8) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "STAEDTLER 100B G6 Mars Lumograph Pencils, Black, Pack of 6"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product8 <- rbind(product8, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product8)
```

product9 - Winsor & Newton 490008 Studio Collection Graphite Pencils, Set of 12, Professional Quality for Artists, for Sketching, Writing and Drawing

```
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product9 <- data.frame()

for (page in 3:7) {
```

```

link9 <- paste0("https://www.amazon.com.au/Winsor-Newton-884955064856-Precision-Sketching/product-rev-
session9 <- bow(link9, user_agent = "Educational Purpose")

scrapeNodes <- function(selector) {
  scrape(session9) %>%
    html_nodes(selector) %>%
    html_text(trim = TRUE)
}

productName <- "Winsor & Newton 490008 Studio Collection Graphite Pencils, Set of 12, Professional Qu
scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b
scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

product9 <- rbind(product9, data.frame(
  prod_name = productName,
  title = scrapedTitle,
  reviewer = scrapedReviewer,
  review = scrapedReview,
  date = scrapedDate,
  ratings = scrapedRating,
  type_of_purchase = scrapedType
))

#Sys.sleep(3)
}

#View(product9)

```

product10 - Bic Kids Evolution ECOLutions Colouring Pencils, Assorted Colours, Eco-Friendly, 70 g,12 Count (Pack of 1)

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product10 <- data.frame()

for (page in 6:10) {
  link10 <- paste0("https://www.amazon.com.au/Bic-Evolution-ECOLutions-Colouring-Eco-Friendly/product-r
  session10 <- bow(link10, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session10) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Bic Kids Evolution ECOLutions Colouring Pencils, Assorted Colours, Eco-Friendly, 70 g

```



```

scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b
scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

product10 <- rbind(product10, data.frame(
  prod_name = productName,
  title = scrapedTitle,
  reviewer = scrapedReviewer,
  review = scrapedReview,
  date = scrapedDate,
  ratings = scrapedRating,
  type_of_purchase = scrapedType
))

#Sys.sleep(3)
}

#View(product10)

```

product11 - Mechanical pencil Pentel PG1013-E GraphGear1000, line width 0.3 mm, rubber (Z2-1N), 1 piece

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product11 <- data.frame()

for (page in 3:7) {
  link11 <- paste0("https://www.amazon.com.au/Pentel-Graphgear-1000-Mechanical-Pencil/product-reviews/B
  session11 <- bow(link11, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session11) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Mechanical pencil Pentel PG1013-E GraphGear1000, line width 0.3 mm, rubber (Z2-1N), 1
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product11 <- rbind(product11, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,

```

```

    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product11)

```

product12 - Derwent Graphic Soft Graphite Drawing Pencils, Ideal For Illustrating & Shading, Set Of 12, Professional Quality, 34215

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product12 <- data.frame()

for (page in 3:7) {
  link12 <- paste0("https://www.amazon.com.au/Derwent-34215-Graphic-Graphite-Professional/product-reviews/34215")
  session12 <- bow(link12, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session12) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Derwent Graphic Soft Graphite Drawing Pencils, Ideal For Illustrating & Shading, Set Of 12, Professional Quality, 34215"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product12 <- rbind(product12, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product12)

```

product13 - Faber-Castell - Castell 9000 Art Set Pencil (Pack of 6), Green

```
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product13 <- data.frame()

for (page in 3:7) {
  link13 <- paste0("https://www.amazon.com.au/Faber-Castell-Castell-9000-Pencil-Pack/product-reviews/B000000000")
  session13 <- bow(link13, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session13) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Faber-Castell - Castell 9000 Art Set Pencil (Pack of 6), Green"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product13 <- rbind(product13, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product13)
```

product14 - Bic - Evolution Triangle - Triangular Pencils with Integrated Eraser - HB - Box of 12

```
library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product14 <- data.frame()

for (page in 3:7) {
  link14 <- paste0("https://www.amazon.com.au/Evolution-Triangular-Pencils-Integrated-Eraser/product-re")
```

```

session14 <- bow(link14, user_agent = "Educational Purpose")

scrapeNodes <- function(selector) {
  scrape(session14) %>%
    html_nodes(selector) %>%
    html_text(trim = TRUE)
}

productName <- "Bic - Evolution Triangle - Triangular Pencils with Integrated Eraser - HB - Box of 12"
scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

product14 <- rbind(product14, data.frame(
  prod_name = productName,
  title = scrapedTitle,
  reviewer = scrapedReviewer,
  review = scrapedReview,
  date = scrapedDate,
  ratings = scrapedRating,
  type_of_purchase = scrapedType
))

#Sys.sleep(3)
}

#View(product14)

```

product15 - STAEDTLER 7755ABK25D Mars Micro Mechanical Pencil, 0.5mm (Blistercard of 1 + 12 HB Lead Refills)

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product15 <- data.frame()

for (page in 1:5) {
  link15 <- paste0("https://www.amazon.com.au/Staedtler-Micro-7755ABK25D-Mechanical-Pencil/product-revi")
  session15 <- bow(link15, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session15) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "STAEDTLER 7755ABK25D Mars Micro Mechanical Pencil, 0.5mm (Blistercard of 1 + 12 HB Lead Refills)"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")

```

```

scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

product15 <- rbind(product15, data.frame(
  prod_name = productName,
  title = scrapedTitle,
  reviewer = scrapedReviewer,
  review = scrapedReview,
  date = scrapedDate,
  ratings = scrapedRating,
  type_of_purchase = scrapedType
))

#Sys.sleep(3)
}

#View(product15)

```

product16 - Faber-Castell Goldfaber Artists' Graphite 4B Pencil

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product16 <- data.frame()

for (page in 1:5) {
  link16 <- paste0("https://www.amazon.com.au/Faber-Castell-Goldfaber-Artists-Graphite-Pencil/product-r
  session16 <- bow(link16, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session16) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Faber-Castell Goldfaber Artists' Graphite 4B Pencil"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product16 <- rbind(product16, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,

```

```

    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product16)

```

product17 - Graphite Pencil - STABILO Exam Grade - Box of 12 - 2B

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product17 <- data.frame()

for (page in 1:5) {
  link17 <- paste0("https://www.amazon.com.au/Graphite-Pencil-STABILO-Exam-Grade/product-reviews/B0050H")
  session17 <- bow(link17, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session17) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Graphite Pencil - STABILO Exam Grade - Box of 12 - 2B"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product17 <- rbind(product17, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product17)

```

product18 - Faber-Castell Grip Plus Set 130997 Mechanical Pencil-Assorted Color

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product18 <- data.frame()

for (page in 1:5) {
  link18 <- paste0("https://www.amazon.com.au/Faber-Castell-130997-Mechanical-Pencil-Assorted-Color/prod
  session18 <- bow(link18, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session18) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Faber-Castell Grip Plus Set 130997 Mechanical Pencil-Assorted Color"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
  scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
  scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

  product18 <- rbind(product18, data.frame(
    prod_name = productName,
    title = scrapedTitle,
    reviewer = scrapedReviewer,
    review = scrapedReview,
    date = scrapedDate,
    ratings = scrapedRating,
    type_of_purchase = scrapedType
  ))

  #Sys.sleep(3)
}

#View(product18)

```

product19 - BIC Matic Original 0.7mm Mechanical Pencils 5 Pack, black

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product19 <- data.frame()

for (page in 1:5) {
  link19 <- paste0("https://www.amazon.com.au/Matic-Original-0-7mm-Mechanical-Pencils/product-reviews/B
  session19 <- bow(link19, user_agent = "Educational Purpose")

```

```

scrapeNodes <- function(selector) {
  scrape(session19) %>%
    html_nodes(selector) %>%
    html_text(trim = TRUE)
}

productName <- "Faber-Castell Grip Plus Set 130997 Mechanical Pencil-Assorted Color"
scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

product19 <- rbind(product19, data.frame(
  prod_name = productName,
  title = scrapedTitle,
  reviewer = scrapedReviewer,
  review = scrapedReview,
  date = scrapedDate,
  ratings = scrapedRating,
  type_of_purchase = scrapedType
))

#Sys.sleep(3)
}

#View(product19)

```

product20 - BIC Matic Original 0.7mm Mechanical Pencils 5 Pack, black

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

product20 <- data.frame()

for (page in 1:5) {
  link20 <- paste0("https://www.amazon.com.au/Rotring-0-7-800-Mechanical-Pencil/product-reviews/B00JEV9")
  session20 <- bow(link20, user_agent = "Educational Purpose")

  scrapeNodes <- function(selector) {
    scrape(session20) %>%
      html_nodes(selector) %>%
      html_text(trim = TRUE)
  }

  productName <- "Faber-Castell Grip Plus Set 130997 Mechanical Pencil-Assorted Color"
  scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text-b")
  scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
  scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
  scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]

```



```

scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

product20 <- rbind(product20, data.frame(
  prod_name = productName,
  title = scrapedTitle,
  reviewer = scrapedReviewer,
  review = scrapedReview,
  date = scrapedDate,
  ratings = scrapedRating,
  type_of_purchase = scrapedType
))

#Sys.sleep(3)
}

#View(product20)

```

FUNCTION TO MAKE SCRAPING EASIER (KAY KAPOY MAG ISA ISA)

```

library(dplyr)
library(rvest)
library(polite)
library(httr)
library(selectr)

scrapeAmazonReviews <- function(product_name, url_stub, pages) {
  product_df <- data.frame()

  for (page in pages) {
    link <- paste0("https://www.amazon.com.au/",url_stub,"/ref=cm_cr_arp_d_paging_btm_next_", page, "?i")
    session <- bow(link, user_agent = "Educational Purpose")

    scrapeNodes <- function(selector) {
      scrape(session) %>%
        html_nodes(selector) %>%
        html_text(trim = TRUE)
    }

    scrapedTitle <- scrapeNodes("span.a-size-base.review-title.a-color-base.review-title-content.a-text")
    scrapedReviewer <- scrapeNodes("span.a-profile-name")[1:10]
    scrapedReview <- scrapeNodes("span.a-size-base.review-text.review-text-content")[1:10]
    scrapedDate <- scrapeNodes("span.a-size-base.a-color-secondary.review-date")[1:10]
    scrapedRating <- scrapeNodes("span.a-icon-alt")[1:10]
    scrapedType <- scrapeNodes("span.a-size-mini.a-color-state.a-text-bold")[1:10]

    product_df <- rbind(product_df, data.frame(
      prod_name = product_name,
      title = scrapedTitle,
      reviewer = scrapedReviewer,
      review = scrapedReview,
      date = scrapedDate,
      ratings = scrapedRating,
      type_of_purchase = scrapedType
    ))
  }
}

```

```

    ))

    Sys.sleep(3)
  }

  return(product_df)
}

```

Scraping 21-30

```

product21 <- scrapeAmazonReviews(
  "Derwent Academy Colouring Pencils, Set of 24 in Tin Box, Blendable Multicolour Artist's Pencils, Ideal for Wet on Dry",
  "Derwent-2301938-Academy-Colouring-Multi-Color/product-reviews/B001XCWP02",
  3:7
)

product22 <- scrapeAmazonReviews(
  "Faber-Castell 111260 Colour Pencils (Pack of 60), 3.5 x 18.6 x 21 cm; 399.16 Grams",
  "Faber-Castell-Colour-Pencils-Pack-60/product-reviews/B01FDKQG2W",
  6:10
)

product23 <- scrapeAmazonReviews(
  "Derwent Graphic Soft Graphite Drawing Pencils, Ideal For Illustrating & Shading, Set Of 12, Professional",
  "Derwent-34215-Graphic-Graphite-Professional/product-reviews/B000J6BAV8",
  3:7
)

product24 <- scrapeAmazonReviews(
  "BIC Intensity colored pencils, triangular crayons, colored pencils for painting in 24 colors, in cardboard box",
  "Intensity-triangular-painting-cardboard-shatterproof/product-reviews/B075N1ZRWW",
  3:7
)

product25 <- scrapeAmazonReviews(
  "Multi-Talented Pencil - STABILO woody 3 in 1 - Pack of 10 - Assorted Colours with Sharpener",
  "Multi-talented-STABILO-assorted-colours-sharpener/product-reviews/B000FFR5KI",
  3:7
)

product26 <- scrapeAmazonReviews(
  "Royal & Langnickel sketching artist pencils - set of 12 drawing pencils 5H to 6B",
  "Royal-Langnickel-sketching-artist-pencils/product-reviews/B003B44N8W",
  3:7
)

product27 <- scrapeAmazonReviews(
  "Derwent Academy Watercolour Pencils, Set of 24 in Tin, Multicolour Artist's Pencils, Ideal for Wet on Dry"
)

```

```

"Derwent-2301942-Watercolour-Colouring-Multicolor/product-reviews/B001XCWP0W",
3:7
)

product28 <- scrapeAmazonReviews(
  "STAEDTLER 2505HBBK2D Mars Micro Refill Leads for Mechanical Pencils - HB, 0.5mm (Blistercard of 2 x 1)",
  "STAEDTLER-2505HBBK2D-Refill-Mechanical-Pencils/product-reviews/B0012LCV94",
  3:7
)

product29 <- scrapeAmazonReviews(
  "Pentel Ain Stein Mechanical Pencil Lead, 0.5mm HB, 40 Leads (C275-HB)",
  "Pentel-Stein-Pencil-Hardness-40-Leads/product-reviews/B004NNPWCG",
  3:7
)

product30 <- scrapeAmazonReviews(
  "ARTEZA Colouring Pencils, Professional Set of 72 Colours in a Tin Box, Soft Wax-Based Cores, for Drawing & Sketching",
  "ARTEZA-Professional-Wax-Based-Sketching-Beginners/product-reviews/B076DHN68W",
  6:10
)

#View(product30)

```

Scraping 31-40

```

product31 <- scrapeAmazonReviews(
  "Staedtler 175 COC12 Hexagonal Colouring Pencils (Pack of 12)",
  "Staedtler-175-COC12-Hexagonal-Colouring/product-reviews/B07KY2WNTV",
  3:7
)

product32 <- scrapeAmazonReviews(
  "Pentel Arts Watercolour Pencil Set - Assorted, 24 Count (Pack of 1)",
  "Pentel-Arts-Watercolour-Pencil-Set/product-reviews/B01G8ACTOK",
  3:7
)

product33 <- scrapeAmazonReviews(
  "Graphite Pencil - STABILO Othello - Pack of 12 - 2H",
  "Graphite-Pencil-STABILO-Othello-box/product-reviews/B005TQRYSG",
  3:7
)

product34 <- scrapeAmazonReviews(
  "STAEDTLER 100 G12 S Mars Lumograph Graphite Pencils for Drawing & Sketching - Assorted Degrees, 8B-2H",
  "Staedtler-100-G12-Lumograph-Pencils/product-reviews/B0010US8JO",

```

```

3:7
)

product35 <- scrapeAmazonReviews(
  "Derwent Charcoal Drawing Pencils, Drawing & Writing, Set Of 6 with Sharpener, Light, Medium, Dark & ",
  "Derwent-Charcoal-Sharpener-Professional-700838/product-reviews/B000PD3M7U",
  3:7
)

product36 <- scrapeAmazonReviews(
  "Ergonomic Graphite Pencil - STABILO EASYgraph - Left-Handed - Pack of 2 - Petrol - HB",
  "Handwriting-Pencil-STABILO-EASYgraph-Blister/product-reviews/B003WQFADG",
  3:7
)

product37 <- scrapeAmazonReviews(
  "Derwent Drawing Colouring Pencils, Drawing & Writing, Set Of 12, Ideal For Illustrating & Detailing, ",
  "Derwent-Coloured-Drawing-Professional-700671/product-reviews/B000J69WU0",
  3:7
)

product38 <- scrapeAmazonReviews(
  "Lyra 3 x Ferby Triangular Jumbo Chunky Pencils Pre School Writing Learning Art",
  "Triangular-Chunky-Pencils-Writing-Learning/product-reviews/B0114KJCYY",
  2:6
)

product39 <- scrapeAmazonReviews(
  "Triangular Colouring Pencil - STABILO Trio thick short - Pack of 12 - Assorted Colours",
  "Colouring-Pencil-STABILO-Assorted-Colours/product-reviews/B0000ZKBTG",
  3:7
)

product40 <- scrapeAmazonReviews(
  "r0tring 600 Mechanical Pencil | 0.7 mm | Blue All-Metal Body Propelling Pencil | Non-Slip Knurled Gr",
  "r0tring-mechanical-Feinminenstift-Metallic-Hexagonal/product-reviews/B085T859JX",
  3:7
)

```

Scraping 41-50

```

product41 <- scrapeAmazonReviews(
  "Derwent34214 Graphic Medium Graphite Drawing Pencils, Set of 12, Professional Quality, Black",
  "Derwent34214-Graphic-Graphite-Drawing-Professional/product-reviews/B000J69KZQ",
  3:7
)

```

```

product42 <- scrapeAmazonReviews(
  "Faber-Castell TK-Fine-9760 Mechanical Pencils Wallet of 3 - 0.35, 0.5, 0.7mm, Green",
  "Faber-Castell-TK-Fine-9713-Mechanical-Pencils-Wallet/product-reviews/B000WF36EO",
  3:7
)

product43 <- scrapeAmazonReviews(
  "ARTEZA Professional Drawing Sketch Pencils Set of 12, Medium (6B - 4H), Art Supplies for Drawing Art",
  "ARTEZA-Professional-Drawing-Sketch-Pencils/product-reviews/B077QS34CZ",
  1:5
)

product44 <- scrapeAmazonReviews(
  "STAEDTLER 144 50NC24 Noris Club Erasable Colouring Pencils - Assorted Colours, Pack of 24",
  "Staedtler-144-Erasable-Colouring-Pencils/product-reviews/B001B2QLC2",
  3:7
)

product45 <- scrapeAmazonReviews(
  "Faber-Castell Grip 1345 0.5mm Mechanical Pencil - Green ",
  "Faber-Castell-Grip-0-5mm-Mechanical-Pencil/product-reviews/B000KT7J96",
  3:7
)

product46 <- scrapeAmazonReviews(
  "Helix Oxford Hb Grade Graphite Pencils (Pack of 12) with Plastic Free Packaging Drawing",
  "Helix-Graphite-Pencils-Plastic-Packaging/product-reviews/B07ZDNXM8W",
  3:7
)

product47 <- scrapeAmazonReviews(
  "Bic Matic Original Mechanical Pencils, Perfect for School and Office Use, 0.7 mm Black (HB), Includes",
  "BIC-Matic-Original-Mechanical-Pencils/product-reviews/B000SHP5P0",
  3:7
)

product48 <- scrapeAmazonReviews(
  "BIC Evolution Graphite Pencils - Pack of 8 - HB Pencils with Eraser - Colourful Stripe Design and Sh",
  "Evolution-Stripes-Eraser-Graphite-Pencils/product-reviews/B01MY2WA44",
  2:6
)

product49 <- scrapeAmazonReviews(
  "BIC Matic ECOlutions Mechanical Pencils - Box of 50 with Assorted Barrel Colours - 0.7 mm HB Friendl",
  "Matic-ECOlutions-0-7mm-Mechanical-Pencils/product-reviews/B0039IVX02",
  3:7
)

```

```

product50 <- scrapeAmazonReviews(
  "BIC Matic Fun, HB Mechanical Pencils and Eraser, Assorted Barrel Colours with Fine ,Yellow,Blue,Green",
  "BIC-Matic-0-7mm-Mechanical-Pencils/product-reviews/B009FYMXCW",
  3:7
)

allProds = data.frame();

allProds <- rbind(allProds, product1, product2, product3, product4, product5, product6, product7, product8,
  product11, product12, product13, product14, product15, product16, product16, product18,
  product21, product22, product23, product24, product25, product26, product27, product28,
  product31, product32, product33, product34, product35, product36, product37, product38,
  product41, product42, product43, product44, product45, product46, product47, product48,

#View(allProds)

```