

Activity 09

Angel Perez

Last Updated: 2022-11-11

```
knitr::opts_chunk$set(echo = TRUE)
library(tinytex)
library(rmarkdown)
library(knitr)
library(kableExtra)
```

```
## Warning in !is.null(rmarkdown::metadata$output) && rmarkdown::metadata$output
## %in% : 'length(x) = 2 > 1' in coercion to 'logical(1)'
```

```
library(rvest)
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following object is masked from 'package:kableExtra':
##
##   group_rows
```

```
## The following objects are masked from 'package:stats':
##
##   filter, lag
```

```
## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union
```

```
library(readr)
```

```
##
## Attaching package: 'readr'
```

```
## The following object is masked from 'package:rvest':
##
##   guess_encoding
```

```
library(ggplot2)
library(tidyr)
```

```
### Raw Data Scraping
## ESPN Tables
espnGiantsTables <- read_html(
  x = "https://www.espn.com/nfl/team/stats/_/name/nyg/table/rushing/sort/yardsPerRushAttempt/dir/asc"
) %>%
  html_elements(css = "table") %>%
  html_table()

## Giants Tables
giantsTables <- read_html(
  x = "https://www.giants.com/team/players-roster/"
) %>%
  html_elements(css = "table") %>%
  html_table()
```

```
### Binding Giants' rows (Creating full team roster)

## Transforming `#` into int.
giantsTables[[1]] <- subset(giantsTables[[1]], giantsTables[[1]]$`#` != "-") %>%
  mutate(`#` = parse_number(`#`))
)
giantsTables[[6]] <- subset(giantsTables[[6]], giantsTables[[6]]$`#` != "-") %>%
  mutate(`#` = parse_number(`#`))
)

## Transforming Exp into int.
#Replace all "R" with "0"
giantsTables[[1]]$Exp <- ifelse(giantsTables[[1]]$Exp == "R", "0", giantsTables[[1]]$Exp)
giantsTables[[3]]$Exp <- ifelse(giantsTables[[3]]$Exp == "R", "0", giantsTables[[3]]$Exp)
giantsTables[[6]]$Exp <- ifelse(giantsTables[[6]]$Exp == "R", "0", giantsTables[[6]]$Exp)

# Exp -> int.
giantsTables[[1]] <- giantsTables[[1]] %>%
  mutate(Exp = parse_number(Exp))
giantsTables[[3]] <- giantsTables[[3]] %>%
  mutate(Exp = parse_number(Exp))
giantsTables[[6]] <- giantsTables[[6]] %>%
  mutate(Exp = parse_number(Exp))

## Fixing "T"= TRUE problem
giantsTables[[5]]$Pos <- ifelse(giantsTables[[5]]$Pos == TRUE, "T", giantsTables[[5]]$Pos)
```

```
### Create Full Roster
## Full Team Roster
roster <- bind_rows(giantsTables[[1]], giantsTables[[2]], giantsTables[[3]], giantsTables[[4]], giantsTables[[5]], giantsTables[[6]], giantsTables[[7]], giantsTables[[8]], giantsTables[[9]], giantsTables[[10]])

##ESPN Scoring Table
espnScoring <- bind_cols(espnGiantsTables[[9]], espnGiantsTables[[10]])
```

```
## New names:
```

```
## * `` -> '...1'
## * `` -> '...2'
## * 'Touchdowns' -> 'Touchdowns...3'
## * 'Touchdowns' -> 'Touchdowns...4'
## * 'Touchdowns' -> 'Touchdowns...5'
## * 'Touchdowns' -> 'Touchdowns...6'
## * 'Scoring' -> 'Scoring...7'
## * 'Scoring' -> 'Scoring...8'
## * 'Scoring' -> 'Scoring...9'
## * 'Scoring' -> 'Scoring...10'
## * 'Scoring' -> 'Scoring...11'
```

#Rename Columns

```
colnames(espnScoring) <- espnScoring[1,]
espnScoring <- espnScoring[-1,]
```

#format espnScoring

```
espnScoring <- espnScoring %>%
  mutate(
    TD = parse_number(TD),
  ) %>%
  mutate(
    GP = parse_number(GP)
  ) %>%
  mutate(
    REC = parse_number(REC)
  ) %>%
  mutate(
    RUSH = parse_number(RUSH)
  ) %>%
  mutate(
    RET = parse_number(RET)
  ) %>%
  mutate(
    FG = parse_number(FG)
  ) %>%
  mutate(
    PAT = parse_number(PAT)
  ) %>%
  mutate(
    `2PT` = parse_number(`2PT`)
  ) %>%
  mutate(
    PTS = parse_number(PTS)
  ) %>%
  mutate(
    `TP/G` = parse_number(`TP/G`)
  )
```

##Separate Name from Position; Remove Total row(s)

```
espnScoring <- espnScoring %>%
  filter(Name != "Total") %>%
  tidyr::separate(
    col = Name,
```

```

    into = c("First", "Last", "Position"),
    sep = "[[:blank:]]"
  ) %>%
  mutate(
    "Player" = paste(First, Last, sep = " "),
    .before = First
  )

```

```

### Combine Both espnScoring and roster
giantsFinal <- inner_join(
  x = roster,
  y = espnScoring,
  by = c()
)

```

```

## Joining, by = "Player"

```