Report

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In this analysis, I will be using a data set, titled player_data_standard, that refers to individual players in European soccer clubs and their current affiliation, as well as standard statistics related to their season highlights.

```
setwd("/home/rstudio/work/611")
getwd()

## [1] "/home/rstudio/work/611"

player_data_standard <- read.csv("source_data/player_data_standard.csv")
head(player_data_standard)</pre>
```

```
Squad Age Born MP
##
     Rk
                   Player
                            Nation
                                      Pos
                                                    League
##
        Brenden Aaronson
                            us USA MF, FW Premier League Leeds United
                                                                           21
                                                                              2000 36
##
   2
      2
            George Abbott eng ENG
                                        MF Premier League
                                                               Tottenham
                                                                           16 2005
                                                                                     1
##
  3
      3
                Che Adams sct SCO
                                        FW Premier League
                                                             Southampton
                                                                           26 1996 28
##
   4
              Tyler Adams
                                        MF Premier League Leeds United
                                                                           23 1999
                                                                                    24
                            us USA
##
   5
      5
        Tosin Adarabioyo eng ENG
                                        DF Premier League
                                                                           24 1997 25
                                                                  Fulham
   6
##
      6
             Nayef Aguerd
                            ma MAR
                                        DF
                                           Premier League
                                                                West Ham
                                                                           26 1996 18
##
              Min X90s Gls Ast G.A G
                                       .PK PK
                                              PKatt CrdY CrdR
                                                                 xG npxG xAG npxG.xAG
          28 2372 26.4
                                                                                    8.1
## 1
                               3
                                   4
                                         1
                                            0
                                                   0
                                                        2
                                                              0 3.9
                                                                      3.9 4.2
                          1
## 2
           0
                1
                   0.0
                          0
                               0
                                   0
                                         0
                                            0
                                                   0
                                                        0
                                                              0.0
                                                                      0.0 0.0
                                                                                    0.0
## 3
          23 1992 22.1
                               3
                                   8
                                         5
                                            0
                                                        1
                                                              0 6.6
                                                                      6.6 2.8
                                                                                    9.4
                          5
                                                   0
## 4
          24 2156 24.0
                               0
                                   0
                                         0
                                                        6
                                                              1 0.1
                          0
                                                   0
                                                                      0.1 1.4
                                                                                    1.5
## 5
          23 2085 23.2
                               0
                                   1
                                         1
                                            0
                                                   0
                                                        4
                                                              0 0.7
                                                                      0.7 0.4
                          1
                                                                                    1.1
          17 1595 17.7
                                   2
                                         2
                                            0
##
   6
                          2
                               0
                                                   0
                                                        4
                                                              0 2.2
                                                                      2.2 0.5
                                                                                    2.7
##
     PrgC PrgP PrgR Gls.1 Ast.1 G.A.1 G.PK.1 G.A.PK xG.1 xAG.1
                                                                     xG.xAG npxG.1
## 1
       43
             86
                 151
                       0.04
                             0.11
                                    0.15
                                            0.04
                                                    0.15 0.15
                                                                0.16
                                                                        0.31
                                                                                0.15
## 2
        0
              0
                       0.00
                             0.00
                                    0.00
                                                    0.00 0.00
                                                                0.00
                                                                                0.00
                    0
                                            0.00
                                                                        0.00
## 3
       17
             34
                 115
                       0.23
                             0.14
                                    0.36
                                            0.23
                                                    0.36 0.30
                                                                0.13
                                                                        0.42
                                                                                0.30
                       0.00
                             0.00
                                                                                0.00
## 4
       19
            136
                   20
                                    0.00
                                            0.00
                                                    0.00 0.00
                                                                0.06
                                                                        0.06
## 5
       16
             95
                             0.00
                                    0.04
                                            0.04
                                                                0.02
                                                                        0.05
                                                                                0.03
                    3
                       0.04
                                                    0.04 0.03
##
   6
        2
             25
                       0.11
                             0.00
                                    0.11
                                            0.11
                                                    0.11 0.13
                                                                0.03
                                                                        0.15
                                                                                0.13
##
     npxG.xAG.1
## 1
            0.31
## 2
            0.00
## 3
            0.42
## 4
            0.06
## 5
            0.05
## 6
            0.15
```

I will describe the meaning of the different columns.

Player - Player name Nation - Abbreviations (2 variations) of the Nation where the player originates from Pos - Position League - League affiliation Squad - Squad (or team) affiliation Age - Age of player Born - Year born MP - Matches played Starts - Number of starts during the regular season Min - Minutes Played X90s - Number of minutes / 90, ie number of 'full game' lengths played in total Gls - Goals scored Ast - Assisted goals G.A - Goals and assists G.PK - Non-penalty goals PK - Peanalty kicks made PKatt - Penalty kicks attempted CrdY - Yellow Cards CrdR - Red Cards xG - Expected goals scored npxG- Non-penalty expected goals scored xAG - Expected assisted goals npxG.xAG PrgC - Progressive Carries PrgP - Progressive passes PrgR - progressive receptions Gls.1 Ast.1 G.A.1