Angel Reese Extra Credit

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Introduction:

Angel Reese was a highly regarded recruit coming out of high school, but her first year of college was cut short by injury. In Reese's second year, she averaged a double-double in one of the premier conferences in the NCAA. Reese's decided that she wanted a change of scenery for the rest of her college career, so she transferred to LSU. At LSU, had Reese matched her year-two production, she would be a lock for All-American, but in true Angel Reese style, she improved yet again. Reese has had a double-double each game this season (in points and total rebounds), which has allowed her to set an SEC record once held by WNBA great Slyvia Fowles. Reese has become a leading contender for National Player of the Year. And so, I chose to make Reese the focal subject of this extra credit assignment.

Necessary Packages

```
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(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.2
## --

## v ggplot2 3.4.0     v purrr   1.0.1
## v tibble  3.1.8     v stringr 1.5.0
## v tidyr   1.3.0     v forcats 0.5.2
## v readr   2.1.3
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter()         masks stats::filter()
## x readr::guess_encoding() masks rvest::guess_encoding()
## x dplyr::lag()            masks stats::lag()
```

Downloading the data

```
angel_url <- 'https://herhoopstats.com/stats/ncaa/player/2023/natl/angel-reese-stats-11eb2f34-d79a-34a4

angel <- angel_url %>%
  read_html()  %>%
  html_nodes(xpath = '//*[@id="schedule"]/div/div/div/div[1]/div/table') %>%
  html_table(header = TRUE)

angel <- data.frame(angel)
game_id <- c(1:nrow(angel))

angel$game_id <- game_id

head(angel)
```

```
##          Date  Tm Loc                Opp gs     MP PTS FGM FGA   FG. X2PM X2PA
## 1 2022-11-07 LSU          Bellarmine  1 23:42  31  11  14 78.6%   11   14
## 2 2022-11-11 LSU     Mississippi Val.  1 23:08  16   5  11 45.5%    5   10
## 3 2022-11-13 LSU         Western Caro.  1 21:21  17   8  12 66.7%    8   12
## 4 2022-11-16 LSU    Houston Christian  1 32:33  29  13  23 56.5%   13   23
## 5 2022-11-20 LSU     Northwestern St.  1 28:30  23  10  15 66.7%   10   15
## 6 2022-11-24 LSU   N     George Mason  1 36:30  21   7  12 58.3%    7   11
##     X2P. X3PM X3PA X3P. FTM FTA   FT. ORB DRB TRB AST TOV STL BLK PF game_id
## 1 78.6%    0    0   --   9  15 60.0%   5   8  13   2   0   4   2  2       1
## 2 50.0%    0    1 0.0%   6   7 85.7%   5  10  15   5   2   4   2  1       2
## 3 66.7%    0    0   --   1   3 33.3%   5  10  15   2   0   1   2  0       3
## 4 56.5%    0    0   --   3   4 75.0%   7   9  16   1   2   1   2  1       4
## 5 66.7%    0    0   --   3   5 60.0%  10   9  19   4   1   3   2  0       5
## 6 63.6%    0    1 0.0%   7   9 77.8%   8  11  19   3   1   1   1  2       6
```

Filtering to Game Date, Total Rebounds

```
baskets_and_boards <- angel %>%
  select('game_id', 'Date','TRB', 'PTS')
```

Adding the game by game average for Points and Total Rebounds

```
baskets_and_boards <- baskets_and_boards %>%
  mutate(game_by_game_pts_avg = round(cummean(PTS),1),
         game_by_game_trb_avg = round(cummean(TRB),1))

head(baskets_and_boards)
```

```
##   game_id       Date TRB PTS game_by_game_pts_avg game_by_game_trb_avg
## 1       1 2022-11-07  13  31                 31.0                 13.0
## 2       2 2022-11-11  15  16                 23.5                 14.0
## 3       3 2022-11-13  15  17                 21.3                 14.3
```

```
## 4       4 2022-11-16  16   29                    23.2                    14.8
## 5       5 2022-11-20  19   23                    23.2                    15.6
## 6       6 2022-11-24  19   21                    22.8                    16.2
```

Adding the 6 Game Mean for Points and Total Rebounds

```r
six_game_mean <- function(column) {
  if_else(baskets_and_boards$game_id %% 6 == 0,  cummean(column), NULL)
}

baskets_and_boards <- baskets_and_boards %>%
  mutate(six_game_pts_avg = round(six_game_mean(PTS),1),
         six_game_trb_avg = round(six_game_mean(TRB),1))

head(baskets_and_boards)
```

```
##   game_id       Date TRB PTS game_by_game_pts_avg game_by_game_trb_avg
## 1       1 2022-11-07  13  31                 31.0                 13.0
## 2       2 2022-11-11  15  16                 23.5                 14.0
## 3       3 2022-11-13  15  17                 21.3                 14.3
## 4       4 2022-11-16  16  29                 23.2                 14.8
## 5       5 2022-11-20  19  23                 23.2                 15.6
## 6       6 2022-11-24  19  21                 22.8                 16.2
##   six_game_pts_avg six_game_trb_avg
## 1             NA               NA
## 2             NA               NA
## 3             NA               NA
## 4             NA               NA
## 5             NA               NA
## 6           22.8             16.2
```

Conclusion:

As you can see, Reese's numbers are consistently impressive, which you can see on a game-by-game basis in average and individual score form. I have also provided an average for both total rebounds and points on a six-game basis. These numbers are something to behold, which gives you all the more reason to tune in!