Week 3A

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September 13, 2025

Create Global Baseline Functions

```
# import tidyverse
# install.packages("readxl")
library(readxl)
```

```
## Warning: package 'readxl' was built under R version 4.4.3
```

```
library(tidyverse)
```

```
## Warning: package 'tidyverse' was built under R version 4.4.3
```

```
## Warning: package 'ggplot2' was built under R version 4.4.3
```

```
## Warning: package 'tibble' was built under R version 4.4.3
```

```
## Warning: package 'readr' was built under R version 4.4.3
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.5.2     v tibble    3.3.0
## v lubridate 1.9.3     v tidyr     1.3.1
## v purrr     1.0.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
library(glue)
```

```
## Warning: package 'glue' was built under R version 4.4.3
```

```r
# Import data provided in class
MovieRatings <- read_excel("MovieRatings.xlsx")
MovieRatings <- data.frame(select(MovieRatings, -1), row.names=MovieRatings$Critic)

# Import personal collected data
movie_reviews <- read.csv("movie_reviews.csv", row.names=1)


# Define function
globalBase <- function(data, name, movie){
  mean_movie <- sum(data, na.rm=TRUE) / sum(!is.na(data))

  movie_relative <- mean(data[[movie]], na.rm = TRUE) - mean_movie

  person_relative <- rowMeans(data, na.rm=TRUE)[[name]] - mean_movie

  result <- (mean_movie + movie_relative + person_relative) %>% round(2)

  return(result)
}
```

Testing

```r
# Testing with class example, Param and Pitch Perfect, should return 2.28
test <- globalBase(MovieRatings, "Param", "PitchPerfect2")
glue("Param Expected: 2.28 \n Param Actual: {test}")
```

```
## Param Expected: 2.28
## Param Actual: 2.28
```

```r
# Using algorithm on my collected data

test2 <- globalBase(movie_reviews, "Dave", "Elvis")
glue("My Expected: 5.95 \n My Actual: {test2}")
```

```
## My Expected: 5.95
## My Actual: 5.95
```