# Movie Rating System - Loops

#### 1. Find the Longest Movie Title

• Instructions: Given

```
movieTitles = ["Inception", "The Dark Knight",
"Interstellar"]
```

, write a loop to find the movie with the longest title and log its name.

# 2. Calculate the Average Rating

• Instructions: Use movieRatings = [8.3, 7.5, 9.0, 8.7] to write a loop that calculates the average rating of these movies. Log the result.

#### 3. Reverse the Movie List

• Instructions: Take

```
movieTitles = ["Inception", "The Dark Knight",
"Interstellar"]
and write a loop to create a new array with the movie titles in reverse
order. Log the new array.
```

# 4. Increase Movie Ratings

• **Instructions**: For movieRatings = [8.3, 7.5, 9.0, 8.7], write a loop to add 0.5 to each movie's rating. Log the updated list of ratings.

#### 5. Filter Movies by High Ratings

• **Instructions**: With movieRatings = [8.3, 7.5, 9.0, 8.7], use a loop to create a new list of ratings over 8.0. Log this new list.

#### 6. Count a Specific Rating's Occurrence

• Instructions: Given

```
movieRatings = [8.3, 8.7, 9.0, 8.7, 8.3] and specificRating = 8.7, count how many times this rating appears. Log the count.
```

#### 7. Find Movies in Both Watched and Wish Lists

• Instructions: With

```
watchedList = ["Inception", "The Dark Knight"] and
wishList = ["Interstellar", "Inception"], create a list of
movies that are in both arrays. Log this list.
```

# 8. Check Ratings Against a Threshold

• Instructions: Using movieRatings = [8.3, 7.5, 9.0, 8.7] and a threshold minRating = 8.0, write a loop to verify if all movies in the array have ratings above this threshold. Log whether this is true or false.

#### 9. Identify the Maximum Rating

• **Instructions**: From movieRatings = [8.3, 7.5, 9.0, 8.7], write a loop to find the highest rating. Log this rating.

#### 10. Find the Highest Rating

• Task: Given an array movieRatings = [8.3, 7.5, 9.0, 8.7], use a loop to determine the highest rating and log this value.

# **Bonus Questions**

# 11. Calculate Averages from a Rating List

Task: You have a 2D array
 ratingsList = [[8, 7, 9], [6, 8, 7], [9, 9, 10]] where
 each sub-array contains ratings for a movie. For each movie, calculate
 its average rating using a loop, then log each average.

#### 12. Display Ratings as a Bar Chart

• Instructions: For an array movieRatings = [8, 5, 9], write a loop that prints out each rating as a bar (e.g., "Movie 1: \*\*\*\*\*\*") to visually represent the rating scale with asterisks (\*).

#### 13. Order Ratings in Ascending Sequence

• Instructions: Take the array

movieRatings = [8.3, 7.5, 9.0, 8.7] and reorder its elements

in ascending order manually using a sorting algorithm implemented with loops. Log the sorted ratings array.

### 14. Calculate Total Ratings from Review Matrix

Given a 2D array
 reviewMatrix = [[7, 8.5], [6, 9], [8, 7.5]] where each
 sub-array contains ratings from different reviews for movies, sum all
 ratings and log the total.

# 15. Find the Movie with Highest Rating in Each Category

• In a matrix ratingMatrix = [[7, 8.5], [6, 9], [8, 7.5]], identify the movie with the highest rating in each category (column) and log the highest rating per category.

# 16. Count Critically Acclaimed Movies in Each Genre

Given a 2D array
genreAcclaimMatrix = [[5, 7], [8, 6], [9, 7]] representing
the acclaim level of movies, count how many critically acclaimed
movies (acclaim level ≥ 7) there are in each genre and log the counts.

#### 17. Sum of Ratings for Blockbuster Movies by Genre

For a ratings matrix
 blockbusterRatingMatrix = [[7, 8.5], [9.5, 9], [8, 7.5]]
 , calculate and log the sum of ratings for each genre where the rating is greater than 8.5.

#### 18. Average Rating of Movies by Director

With a director rating matrix
 directorRatingMatrix = [[7, 8.5], [6, 9], [8, 7.5]],
 where each row represents a different director and columns represent
 ratings for their movies, calculate the average rating for each director
 and log the averages.