## Task: Collaborative Filtering Recommender System for Film Recommendations

Yousef Adham Mahmoud Awad Mahmoud Assignment 7

## **Sections:**

- 1. Section 1: importing the necessary libraries
- 2. Section 2: Reading and preprocessing the dataset. I removed the unnecessary columns, merged the data and kept only the first 200 users & movies.
- 3. Section 3: Calculating the cosine similarity matrix: I calculate the similarity matrix by employing the cosine similarity function using the merged dataset. The similarity matrix measures the similarity between movies based on user ratings.

## **Output:**

- 1. Top 10 Similar Movies: The output of the code's section 4 is a list of the top 10 movies that are most similar to Toy story, and Waiting to Exhale. The list includes titles, and similarity score.
- 2. Film Recommendations for User: The output of section 5 is a recommender function that lists three films recommended to user ID 200. These recommendations are based on the similarity matrix and aim to suggest movies that are similar to the ones the user has previously rated positively.