**Report**

**Model :**

in ***CF\_Recommender.py***

**Functions:**

* **read\_data() :**

read the data from the movies.csv and ratings.csv files

* **get\_matrix() :**

turn user’s id , movie’s id and rating as matrix and make the rating the value of each cell

* **cosine\_similarity\_mat():**

turn rating matrix to cosine similarity matrix

* **get\_highest\_similarity():**

get n of highest similar movies of list of similarities

* **get\_highest\_similar\_to():**

get highest similar movies to a movie

**Output :**

* **Point 2 :**

**Toy Story (1995) is similar to:**

1- Braveheart (1995)

2- Apollo 13 (1995)

3- Usual Suspects, The (1995)

4- Happy Gilmore (1996)

5- Die Hard: With a Vengeance (1995)

6- Seven (a.k.a. Se7en) (1995)

7- Babe (1995)

8- Batman Forever (1995)

9- Taxi Driver (1976)

10- Twelve Monkeys (a.k.a. 12 Monkeys) (1995)

**Waiting to Exhale (1995) is similar to:**

1- Before and After (1996)

2- Mighty Morphin Power Rangers: The Movie (1995)

3- Mad Love (1995)

4- Georgia (1995)

5- Now and Then (1995)

6- Reckless (1995)

7- How to Make an American Quilt (1995)

8- Something to Talk About (1995)

9- Big Green, The (1995)

10- Restoration (1995)

* **Point 3 :**

1- American President, The (1995)

2- Net, The (1995)

3- Get Shorty (1995)