T1: Implement Content-based approach for following

User watches movie 5, 6 and 7, sort out other movie so that user will watch that movies

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | comedy | drama | thriller | Actor1 | Actor2 | Actor3 | animals | fictional | based on real | usa | france |
| movie 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| movie 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| movie 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| movie 4 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| movie 5 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| movie 6 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| movie 7 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |

T2: Implement collaborative-filtering user-user version, and item-item version, predict rating of movies that u3 have not seen

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | m1 | m2 | m3 | m4 | m5 | m6 |
| u1 | 3 | 4 | 1 |  | 2 | 5 |
| u2 | 2 | 3 |  |  |  | 5 |
| u3 |  |  | 4 | 5 | 1 | 4 |
| u4 |  |  | 3 | 4 |  | 1 |

T3: Use educational dataset, implement code, try to suggest movies to any specified user

<https://grouplens.org/datasets/movielens/>