## **ASSIGNMENT 8-Collaborative Filtering**

Mahima V PES1201700665

Amrita hegde PES1201700970

Chaitra H P PES1201701370

## **Problem Statement:**

## Use collaborative filtering to recommend

Out[32]:							
		userld	movield	rating_x	timestamp	rating_y	adg_rating
	0	12882	1	4.0	1147195252	4.061321	-0.061321
	1	12882	32	3.5	1147195307	4.061321	-0.561321
	2	12882	47	5.0	1147195343	4.061321	0.938679
	3	12882	50	5.0	1147185499	4.061321	0.938679
	4	12882	110	4.5	1147195239	4.061321	0.438679

genres	title	ovield	mo
Adventure Animation Children Comedy Fantasy	Toy Story (1995)	1	0
Adventure Children Fantasy	Jumanji (1995)	2	1
Comedy Romance	Grumpier Old Men (1995)	3	2
Comedy Drama Romance	Waiting to Exhale (1995)	4	3
Comedy	Father of the Bride Part II (1995)	5	4

	movield	userld	tag	timestamp
0	3916	12882	sports	1147195545
1	4085	12882	Eddie Murphy	1147195966
2	33660	12882	boxing	1147195514
3	1197	320	must show	1145964801
4	1396	320	must show	1145964810

movield userld	1	2	3	4	5	6	7	9	10	11		106487	106489	106782	a a
316	-0.829457	-0.436518	-0.468109	-0.770223	-0.615331	0.320415	-1.329457	-0.690175	-0.829457	-0.094277		0.105075	0.006629	0.262314	0.2
320	0.200220	-0.436518	-0.468109	-0.770223	-0.615331	0.320415	-0.203889	-0.690175	-0.150642	-0.094277	12.	0.105075	0.008629	0.262314	0.2
359	1.314526	-0.436518	-0.468109	-0.770223	-0.615331	1.314526	-0.203889	-0.690175	0.314526	0.314526		0.105075	0.008629	0.262314	0.2
370	0.705596	0.205596	-0.468109	-0.770223	-0.615331	1.205598	-0.203889	-0.690175	-0.150642	-0.094277		-1.294404	-0.794404	0.705596	0.2
910	1.101920	0.101920	-0.398080	-0.770223	-0.398080	-0.398080	-0.203889	-0.690175	-0.150642	0.101920		0.105075	0.008629	-0.398080	0.2

5 rows × 2500 columns

	top1	top2	top3	top4	top5	top6	top7	top8	top9	top10	 top21	top22	top23	top24	top25	top26	top27	t
userld																		
316	113673	117918	9050	12882	38187	102668	98880	43829	13215	78501	 88608	120782	74472	53834	88928	42245	58265	8
320	12288	113673	28159	79846	134627	112948	120729	97163	2945	4931	 39271	94883	127683	101137	54989	134521	80946	1
359	102118	96482	102532	50898	2702	60016	23428	120782	57937	42096	 117258	7723	120729	61305	40768	117918	86768	12
370	48845	42245	40768	23428	123707	60016	45120	113645	97195	102118	 5611	20530	2702	38159	359	43354	117144	9
910	87042	131620	67352	40768	31321	48821	26222	63295	5811	370	 134521	88738	48845	108195	70201	58265	18115	11

5 rows × 30 columns

	rating_x_x	rating_x_y	title
0	5.0	5.0	Matrix, The (1999)
1	5.0	4.5	Lord of the Rings: The Fellowship of the Ring,
2	5.0	4.0	Lord of the Rings: The Two Towers, The (2002)
3	4.5	4.0	Lord of the Rings: The Return of the King, The
4	1.5	1.0	Serenity (2005)

## score (u,i) is 4.255766437391595

Enter the user id to whom you want to recommend : 370

The Recommendations for User Id : 370

Band of Brothers (2001)

Godfather: Part II, The (1974)

Wallace & Gromit: The Wrong Trousers (1993)
Bicycle Thieves (a.k.a. The Bicycle Thief) (a.k.a. The Bicycle Thieves) (Ladri di biciclette) (1948)
Spirited Away (Sen to Chihiro no kamikakushi) (2001)