



KATHMANDU UNIVERSITY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DATABASE MANAGEMENT SYSTEM
COMP 232

Lab 4 Report

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3. Some SQL queries to explore tables

```
-- some queries to explore the table

select * from actors limit 4;
select * from directors limit 5;
select * from movies m limit 6;
select * from movies2actors ma limit 7;
```

output: 3.243986

4. SQL queries to explore the tables

I. average rating of all movies

```
-- average rating of all movies
create view average_rating as
(select movieid, avg(CAST(rating as integer)) from u2base as u
natural join movies group by movieid);

select * from average_rating;
```

II. number of actors in each movie

```
-- number of actors in each movie
create view number_of_actors as
(select movieid, count(actorid) from actors
natural join movies2actors group by movieid);
select * from number_of_actors;
```

	123 movieid ↕	123 count ↕
1	1,892,794	38
2	1,932,235	10
3	2,457,395	43
4	2,032,626	27
5	1,915,498	39
6	1,759,448	80
7	2,273,048	56

III. number of ratings for each movie

```
-- number of ratings for each movieid
```

```

create view number_of_ratings as
(select movieid, count(CAST(rating as integer)) from u2base as u
natural join movies
group by movieid);
select * from number_of_ratings;

```

	123 movieid 🔍	123 count 🔍
1	1,892,794	119
2	1,932,235	59
3	2,032,626	348
4	2,457,395	109
5	1,915,498	564
6	1,759,448	40
7	2,273,048	643

IV. number of ratings by each user

```

-- number of ratings by each user
select userid, count(movieid) from u2base ub
natural join movies
group by userid
order by userid ASC;

```

	123 userid 🔍	123 count 🔍
1	1 🔍	52
2	2 🔍	129
3	3 🔍	51
4	4 🔍	21
5	5 🔍	197
6	6 🔍	71
7	7 🔍	31

5. Find the number of unrated movies

```

-- number of users who have rated atleast one movies
select count(c.count) from
(select count(u.userid) from users as u
inner join u2base as ub

```

```
on u.userid = ub.userid group by u.userid) as c;
```

Output: 6039

6. Find the number of unrated movies

```
-- number of users who have rated atleast one movies
select count(c.count)from
(select count(u.userid) from users as u
inner join u2base as ub on u.userid = ub.userid
group by u.userid) as c;
```

Output:

movieid	year	isenglish	country	runningtime
1673647	3	F	France	3
1684910	4	T	USA	1
1688565	4	T	UK	2
1690710	4	T	USA	1
1690958	4	T	other	2
1697774	4	T	other	1
1710609	3	F	other	2
1719614	1	T	UK	1
1729579	2	F	other	1

7. Find 10 highest rated movies and the actors who played in those movies.

```
select * from movies2actors where movieid in
(select movieid from average_rating
order by avg desc limit 10);
```

movieid	actorid	cast_num
2525874	421093	1
2525874	432319	1
2525874	1288587	1
2525874	2317264	1
2525874	2469995	1
2525874	46314	2
2525874	486217	2
2525874	493203	2
2525874	735522	2
2525874	741168	2
2525874	955582	2

movieid	actorid	cast_num
2525874	1466500	2
2525874	1509917	2
2525874	1613572	2
2525874	2009197	2
2525874	2315719	2
2525874	2453123	2