National University of Computer and Emerging Sciences



In-Lab 4 Exercise

"Nested Queries"

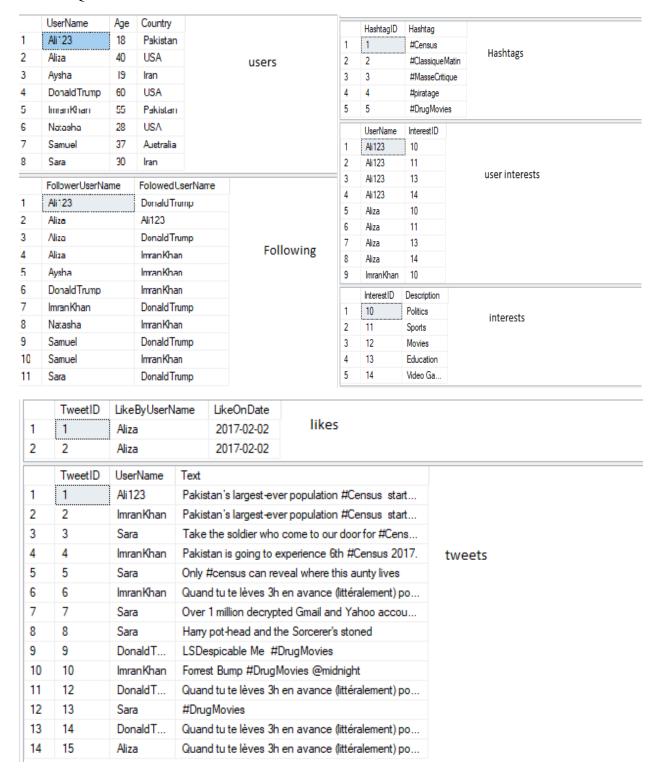
Database Systems

Spring 2022

Department of Computer Science FAST-NU, Lahore, Pakistan

Total Time: 120 Minutes Schema:

For this exercise use the following schema, the script to create this schema and populate data is given in Twitter.SQL file.



Exercise:

1. What is maximum, minimum, average and standard deviation of ages of the users? (Search Standard Dev function)

Expected Output:

	MaxAge	MinAge	StdevAge
1	60	18	15.431299362011

2. Give name of the user who has the highest number of followers.

Expected Output:

	UserName	NoOfFollowers
1	DonaldTrump	5
2	lmran Khan	5

3. Give name of the user who has second highest followers.

Expected Output:

	UserName	NoOfFollowers
1	Ali123	1

4. List names of all the users who have never tweeted.

Expected Output:

	UserName
1	Aysha
2	Natasha
3	Samuel

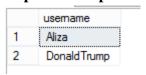
5. List all the hashtags and usernames and number of times that user used that hashtag.

Expected Output:

	hashtag	usemame	noOfTimes
1	#Census	Ali123	1
2	#MasseCritique	Aliza	1
3	#DrugMovies	DonaldTrump	1
4	#MasseCritique	DonaldTrump	2
5	#Census	Imran Khan	2
6	#DrugMovies	Imran Khan	1
7	#MasseCritique	Imran Khan	1
8	#Census	Sara	2
9	#DrugMovies	Sara	1
10	#piratage	Sara	1

6. Find the users who have never used the hashtag #Census.

Expected Output:



7. List all the usernames that have never been followed. Using Set operation

Expected Output:

	UserName
1	Aliza
2	Aysha
3	Natasha
4	Samuel
5	Sara

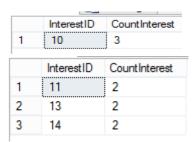
8. List all the usernames that have never been followed. Using Exist Clause.

Expected Output:



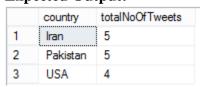
9. Find the most common interest of users. (The interest with largest number of users). Also find the least common interest.

Expected Output:



10. Show total tweets per country. The result should be in order of country name.

Expected Output:



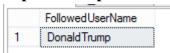
11. List names of all the users whose number of tweets is more than average number of tweets per user.

Expected Output:

	usemame	NumberOfTweets
1	DonaldTrump	3
2	Imran Khan	4
3	Sara	5

12. Give the name of the users who have at least one follower from Pakistan.

Expected Output:



13. Show the interest ID and description of interest with the most number of users.

Expected Output:

