National University of Computer and Emerging Sciences



Lab 4

"Data Retrieval Select-from-where, Nested Queries"

Database Systems Lab

Spring 2024

Department of Computer Science FAST-NU, Lahore, Pakistan



Schema:

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

	UserName	Age	Country	
1	Ali123	18	Pakistan	
2	Aliza	40	USA	users
3	Aysha	19	Iran	
4	Donald Trump	60	USA	
5	lmran Khari	55	Pakistarı	
6	Natasha	28	USA	
7	Samuel	37	Auetralia	
8	Sara	30	Iran	

	FollowerUserName	FollowedUserName	
1	Ali123	DonaldTrump	
2	Aliza	Ali123	
3	Aliza	DonaldTrump	
4	Aliza	Imran Khan	Following
5	Aysha	Imran Khan	
6	DonaldTrump	Imran Khan	
7	Imran Khan	DonaldTrump	
8	Natasha	Imran Khan	
9	Samuel	DonaldTrump	
10	Samuel	Imran Khan	
11	Sara	DonaldTrump	

	HashtagID	Hashtag	
1	1	#Census	Hachtage
2	2	#ClassiqueM	Hashtags
3	3	#MasseCritiq	jue
4	4	#piratage	
5	5	#DrugMovies	s
	UserName	InterestID	
1	Ali123	10	
2	Ali123	11	
3	Ali123	13	user interests
4	Ali123	14	
5	Aliza	10	
6	Aliza	11	
7	Aliza	13	
8	Aliza	14	
9	ImranKhan	10	
	InterestID	Description	
1	10	Politics	interests
2	11	Sports	IIICICIC
3	12	Movies	
4	13	Education	
5	14	Video Ga	



	TweetID	LikeByUserName		LikeOnDate		
1	1	Aliza		2017-02-02	likes	
2 2		Aliza		2017-02-02		
	TweetID	UserName	Text			
1	1	Ali123	Pakistan's largest-ever population #Census start			
2	2	Imran Khan	Pakis	Pakistan's largest-ever population #Census start		
3	3	Sara	Take	Take the soldier who come to our door for #Cens		
4	4	Imran Khan	Pakis	Pakistan is going to experience 6th #Census 2017.		
5	5	Sara	Only	Only #census can reveal where this aunty lives		
6	6	Imran Khan	Quar	Quand tu te lèves 3h en avance (littéralement) po		
7	7	Sara	Over	Over 1 million decrypted Gmail and Yahoo accou		
8	8	Sara	Ham	Harry pot-head and the Sorcerer's stoned		
9	9	DonaldT	LSD	LSDespicable Me #DrugMovies		
10	10	Imran Khan	Forre	st Bump #DrugMo	ovies @midnight	
11	12	DonaldT	Quar	nd tu te lèves 3h e	en avance (littéralement) po	
12	13	Sara	#Dru	gMovies		
13	14	DonaldT	Quar	nd tu te lèves 3h e	en avance (littéralement) po	
14	15	Aliza	Quar	nd tu te lèves 3h e	en avance (littéralement) po	

Exercise:

- 1. Find the tweets liked by users who are following 'ImranKhan'.
- 2. List the usernames of users who have interests in politics.
- 3. Get the usernames of users who have liked tweets by 'DonaldTrump'.
- 4. Find the tweets liked by users who have interests in both politics and sports.
- 5. List the usernames of users who are not following anyone
- 6. Retrieve the usernames of users who have liked tweets containing the hashtag '#MasseCritique'.
- 7. List the tweets liked by users who are from the USA.
- 8. Find the usernames of users who have interests in both movies and sports.
- 9. Retrieve the tweets liked by users who are following 'Ali123'
- 10. List the usernames of users who have not liked any tweet.
- 11. Find the tweets liked by users who have interests in education