

# National University of Computer and Emerging Sciences Lahore Campus

USER

Uname	Age	Gender
Sara	25	F
Zara	42	F
Ali	15	M
Ahmad	19	M
Aliya	27	F
Tania	29	F
Hamza	34	M

TOPIC

TId	Name	Subject
1	Deep Learning	Computer Science
2	Big Data	Computer Science
3	Databases	Computer Science
4	Algorithms	Computer Science
5	Human Interactions	Philosophy

BLOG

BId	Bname	Bwriter	TopicId
10	BigData Frameworks	Ahmad	2
20	Generation Gap	Sara	5
100	Map Reduce	Hamza	2
30	The world of CNN	Ali	1
50	Cassandra	Ali	3
70	Neural Nets	Tania	1
60	MongoDB	Tania	3
120	Emerging trends	Sara	2
80	Hbase	Ali	3

COMMENT

CId	BlogId	Cwriter
1	20	Hamza
2	100	Hamza
3	20	Zara
20	80	Hamza
7	30	Zara
9	50	Zara
5	80	Ali
12	50	Ahmad
15	50	Tania

Write sql queries and rdd

- Find the name and age of the users who have never written any blog and have never given any comment.
- Find the name of the users who have given comments on all the blogs written in the Computer science area.
- Find the Cwriter whose comments on the topic name "Database"

## CLO # 1: Basic Concept of RDD

Q2: [10 marks] Suppose you have a dataset containing information about students and their grades. Each record in the dataset consists of a tuple (student\_id, [(subject, grade)]), where student\_id is the unique identifier of the student and [(subject, grade)] represents a list of tuples containing subject and the corresponding grade obtained by the student in that subject.

Tasks:

- Calculate the average grade for each student across all subjects.
- Find the highest grade obtained by each student.

Note: Don't used DataFrame

1. ("Math", 80), ("Science", 75), ("English", 90)
2. ("Math", 85), ("Science", 92), ("English", 88)
3. ("Math", 78), ("Science", 80), ("English", 85)
4. ("Math", 90), ("Science", 87), ("English", 92)

# National University of Computer & Emerging Sciences

Lahore Campus

CLO # 1: Basic concept of Hive

---

Question 3: Marks 5

- a) What are the different types of tables supported by Hive
- b) Explain the role of metastore in Hive. Why is it important