National University of Computer and Emerging Sciences, Lahore Campus

	Course:	**Database Systems**	**Course Code:**	
	Program:	**BS (Computer Science)**	**Semester:**	**Spring 23**
	Due Date:	**24ᵗʰ Feb 23, (in class and GC)**	**Total Marks:**	**55**
	Section:	**BCS-4J**	**Page(s):**	**3**

Instruction/Notes: This assignment is to be submitted as a **hard copy**. It is an **individual assignment**, do not copy the work of your peers. **Use proper assignment papers** for solving your assignment questions, rough pages will not be credited. The assignment must be **hand-written.**

Question1:

Consider the following schema. (Each query is independent of other)

Employee:

ID	Name	CNIC	Dept	PhnNum	email
1	Hassan	3520224564741	D1	03031111222	hassan123@gmail.com
2	Ali	3520224564742	D2	03032323123	ali123@gmail.com
3	Ahmad	3520224564743	D1	03031111333	Ahmad123@gmail.com
4	Jibran	3520224564745	D3	03031111338	Jibran123@gmail.com
5	Sana	3520224564746	D1	03034344333	Sana123@gmail.com

Employee Login:

ID	Password
1	Hello123
2	Hi123535
3	Ahmad344
4	Jib12342
5	Sana_123

EmployeeCard:

empId	cardNum
1	12345678
2	13718232
3	13894789
1	23768478

CardDetails:

CardNum	PIN	ExpireDate	Balance
12345678	1234	2024-12-11	5000000
13718232	1222	2024-11-12	133433
13894789	1111	2023-12-09	10333
23768478	2233	2024-12-11	340000

Department:

deptId	deptName
D1	Marketing
D2	Social Media
D3	Sales

Venue:

Id
V1
V2
V3
V4
V5

Online Venue:

ID	totalCapacity	venueName
V2	15	GoogleMeet
V4	11	Zoom
V6	12	Skype

Physical Venue:

ID	totalCapacity	venueName
V1	15	Conference Room
V3	20	Auditorium
V5	11	Office

Physical Venue Details:

ID	Date	status
V1	2/16/23	booked
V3	22/2/23	available
V1	3/16/23	available

All Meetings(empId arranged the meeting)

Id	venId	empId	DeptId	title	Date	mode	duration
1	V1	1	D1	Digital Marketing	2/16/23	physical	2 hrs
2	V2	3	D2	Instagram	21/2/23	Online	1 hrs
3	V3	2	D3	Important Details	22/2/23	physical	3 hrs
4	V1	1	D1	Tactics	3/16/23	Physical	1 hr

Meeting Participants:

MeetingID	ParticipantId
1	2
1	3
1	4
2	1
2	4

a. Solve the following queries. (3 marks each)

1. Create a view to list down all the existing meetings and the participant email too.
2. Count total number of employees in department D1
3. Write a query to reset the Employee Password for ID 3 such that the length of the password should be 8.
4. List down all the physical meeting details. (It should include the host Name, Department Name, Meeting Title, Date, Mode, Duration, Venue Name, total Capacity)
5. Display all the meetings with complete details that are scheduled on 2/16/23
6. Display the count of total Number of Participants in each meeting.
7. Schedule an Online Meeting with the details required.
8. Delete meeting whose title is Digital Marketing. (When a meeting is deleted all the participants are also removed also remove from physical venue details)
9. List the name of the employees who are never a part of any meeting. (using expect)
10. List the name of the employees who have arranged any meetings. (Using Intersect)

b. Solve without using Joins and Cartesian Product. (5 Marks each)

1. List the name of the employee who has maximum balance in his/her card (One person can have more than 1 card, check cards individually for max balance).
2. Give the user who has second minimum balance in his/ her account.
3. List the name of meetings that are scheduled online with the venue Name and total capacity.
4. Find the most common meeting. (The meeting with largest number of employees).
5. Show the venue ID and name with the most number of meetings.