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Q-1. Write down the diffrence between DBMS V/S RDBMS.

No	DBMS	RDBMS
1.	DBMS stores data as file	RDBMS stores data in tabular form.
2.	Data elements need to access individually	Multiple data elements can be accessed at the same time.
3.	No relationship between data	Data is stored in the form of tables which are related to each other.
4.	Normalization is not present.	Normalization is present.
5.	DBMS does not support distributed database.	RDBMS supports distributed database

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Q-2 Write down the advantages of DBMS

- Data Integrity: Ensure accuracy and consistency of data through constraints and validation rules
- Data Security: Provides robust security measures, allowing access control and user authentication.
- Data Redundancy: Reduces data duplication by centralizing data storage, mining redundancy.
- Data Consistency: Maintains uniformity of data accorss the database, preventing conflicting data entries.
- Backup and Recovery: Facilitates data backup and recovery processess to prevent data loss.
- Multi-user Support: Enables multiple users to access and manipulate data concurrently without conflicts.
- Data Abstraction: Simplifies data management by providing a higher level of abstraction from physical data storage.

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- Effcient Data Access: Uses indexing and query optimization techniques to improve data retrieval speeds.

Q-3 Explain in brief: Actors and Workers.

Actors:-

1] Database Administrator (DBA):
- Responsible for the overall management of the database System.
- Tasks include installion, configuration, monitioring, backup, Security and performance tuning.

2] End Users:
- Individuals who interact with the database through applications.
- Casual Users: User pre-built reports and simple queries for daily tasks.
- Power Users: Engage with more complex queries and analysis, often utilizing advanced features.

3] Application Programmers:
- Develop software applications that interface with the database

4] System Analysis:
- Access business requirements and translate them into database specification.

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Workers:-

1) DBMS Software:
- The underlying software that manages data storage and retrieval.
- Processes SQL command and enforces data integrity through constraints and rules.

2) Database Engines:
- Handle the actual storage, retrieval and management of data.
- Diffrent engines may optimize for performance, reliability or specific workloads.

3) Data Analysts:
- Analyze data stored in the database to provide insights and support decision-making.
- Often use tools and queries to generate reports and visualizations.

4) Backup and Recovery Tools:
- Ensure data safety by creating backups and providing recovery option in case of failure.
- Often part of the DBA's responsibilities but can also be managed by specific software.