Data Base Lab01

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Basic Tasks

Task2/ From the point of view of computer science, data refers to all the numbers, letters, symbols, etc. that can be input into the computer and processed by the computer program, and have a certain meaning.

Information refers to encoded data, which can exist in the form of words, sounds, images, or other symbols.

The main difference between data and information is that data is raw and unorganized facts and figures, while information is processed, organized, and meaningful data that provides value and understanding.

Metadata is data about data or data that describes data.

We need metadata to provide context, organization, and management for data.

Medium Tasks

Task3/ Data privacy refers to the protection and control of personal or sensitive data to ensure that it is not accessed, used, or disclosed without proper authorization.

Key elements that organizations use to maintain data privacy compliance:

Data minimization practices: Limiting the collection and retention of data to only what is necessary.

Encryption tools: Encrypting sensitive data to protect it from unauthorized access.

Access control rules: Establishing strict rules on who can access specific data and under what circumstances.

Privacy policies: Clearly defining how data will be used and protected.

Data anonymization and pseudonymization techniques: To make data less identifiable.

Data Privacy Importance For Individuals:

Identity Theft\Financial Loss\Reputation Damage\Privacy Invasion

Data Privacy Importance For Businesses:

Legal Liability/Reputational Risk\Competitive Disadvantage\Operational DisruptionDifferences in Data Privacy Concerns

Individuals primarily focus on protecting their personal information from misuse or unauthorized access.

Businesses, on the other hand, must consider a broader range of data privacy issues. They need to protect not only their own sensitive information but also that of their customers, employees, and partners.