2 Lecture - CS403

Important Subjective

1. Define data and information.

Answer: Data refers to raw and unprocessed facts, figures, and symbols. Information, on the other hand, is a collection of data that has been organized, processed, and interpreted to provide meaning and context.

What is the difference between data and information?

Answer: The main difference between data and information is that data is raw and unprocessed, while information is a collection of data that has been organized, processed, and interpreted to provide meaning and context.

Why is data alone not useful?

Answer: Data alone is not useful because it lacks context and meaning. It needs to be processed, organized, and interpreted to become meaningful information that can be used for decision-making, analysis, and communication.

Can data be interpreted without being organized?

Answer: Data can be interpreted without being organized, but it is not efficient or effective. Organizing data makes it easier to interpret, analyze, and communicate.

What is an example of data?

Answer: An example of data could be a list of numbers, a set of measurements, or a collection of survey responses.

What is an example of information?

Answer: An example of information could be a report summarizing the company's financial performance, a chart showing the distribution of ages in a population, or a graph showing the number of visitors to a website.

How is data processed to become information?

Answer: Data is processed to become information by organizing it into a structured format, analyzing it to extract insights and meaning, and interpreting it to provide context and relevance.

What is the importance of information in decision-making?

Answer: Information is important in decision-making because it provides relevant and meaningful insights that can inform choices and actions. It helps to reduce uncertainty, mitigate risks, and improve outcomes.

What is data mining?

Answer: Data mining is the process of analyzing data to extract information and insights. It involves using statistical and machine learning algorithms to identify patterns, relationships, and trends in large datasets.

What is the role of visualization in data and information?

Answer: Visualization is an important tool in data and information because it helps to

communicate complex information in a simple and accessible format. It allows for better understanding, analysis, and decision-making.