The Data Cleaning Process

Data Cleaning

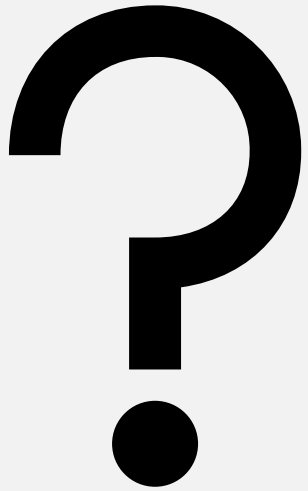
- Also called data cleansing
- Steps to prepare data for analysis
- Often, spend more time on cleaning than analysis

Examples of Data Cleaning

- Missing data
  - Data entry mistake?
  - Data doesn’t exist?
  - May need to remove or replace with 0 or an average
- Duplicate data
  - Data entry mistake?
  - Data updates?
  - Need to remove duplicate rows
- Inconsistent data
  - Multiple data types in the same column
  - Different formats for column labels
- Outliers
  - Extreme values
  - Determine if they need to be included or removed

Examples of Data Cleaning

Missing Data | Duplicate Data | Inconsistent Data | Outliers



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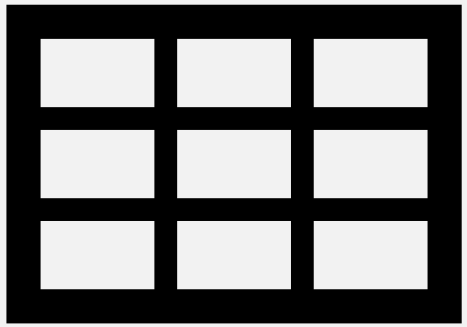

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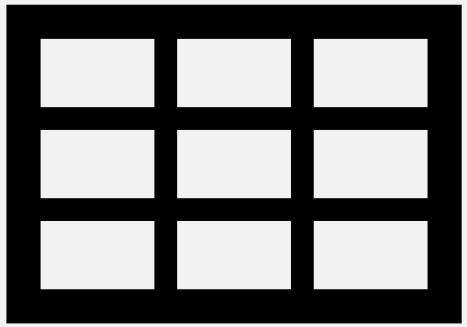

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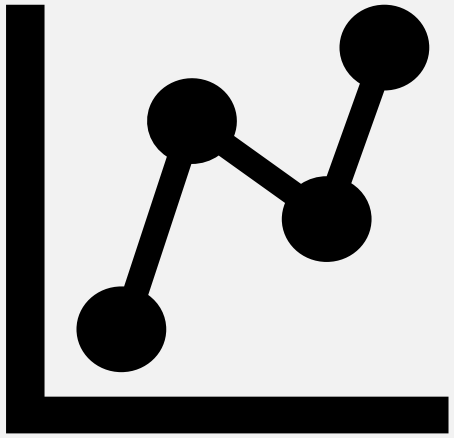

- Extreme values
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