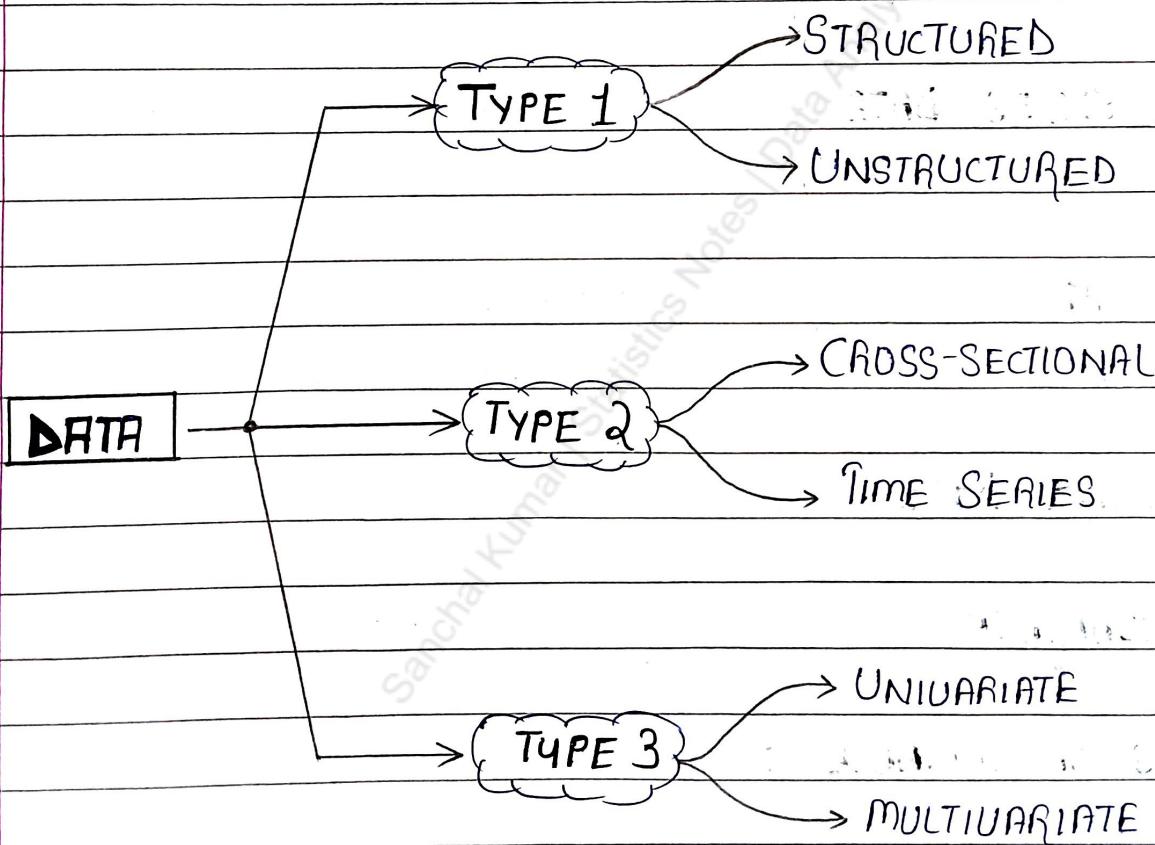


DATA :

- Data is essentially RAW INFORMATION collected from different sources.
 - NUMBERS
 - TEXT
 - FACTS
- Analyzing data → INFORMED DECISIONS OR DRAWING CONCLUSION.



- STRUCTURED DATA :

- ↳ Tables
- ↳ Spreadsheets
- ↳ Relational Database

- UNSTRUCTURED DATA :

- ↳ Multimedia Contents (img, audio, videos)
- ↳ Text (e-mails, articles, blogs)
- ↳ Webpage content

- CROSS-SECTIONAL DATA : Data collected at a single point of time.

E.g.: Survey data collected on a particular date.

- TIME SERIES DATA : Data collected over a sequence of time intervals.

Eg :- Monthly / Daily Stock Prices.

Monthly sales data collected over several intervals of time.

- UNIVARIATE DATA :- Single variable

- MULTIVARIATE : Two or more variables.

- * TYPES OF VARIABLES :

1. NOMINAL : Think of categories without a specific order, like GENDER or COLOURS.

2. ORDINAL : These have specific order but no regular/uniform difference between them like EDUCATION LEVEL CUSTOMER RATING.

3. NUMERICAL: These are numbers with meaningful differences like, phone, age or price.

4. CATEGORICAL: Similar to nominal but often used for types like types of cars or product categories.

5. INTERVAL: These have meaningful intervals between values but no TRUE ZERO like TEMPERATURE OR IQ.

6. RATIO - These have TRUE ZEROS and meaningful ratios like HEIGHT OR WEIGHT.