

STATS

Lecture 1

8. Sep.

Variable:

- Any characteristic whose values can change from one element to another element.
- Any characteristic that can assume different values.

Data:

Set of information about variables.

Variable

Qualitative



Those variables which can't be numerically measured.

Quantitative

Those variables which can be numerically measured.

Data

Qualitative



Data about qualitative variables.

e.g. Blood Group

Quantitative

Data about quantitative variables.

e.g. C/Pt, Weight

Quantitative Variables

Discrete



Countable variable
(How many?)

Continuous



Measurable Variable
(How much?)

(n) **Population:** → (Statistical Population)
Set of objects under study.

(n) **Sample:**
Subset of population is called sample.

Sampling:
Process of sample selection.

Sampling

Random/
Probability



Each sample has
chance to be
selected.
Can be generalization
for the population.
A sample selected
in random sampling.

Non-Random/

Non-Probability



Sample is selected on
personal judgement.
Each sample does not
have the chance to
be selected.
Result of non-random
samples is only valid
for themselves.

Population

Finite



Known number
of elements

Infinite



Unknown number
of elements

Finite → Real / Hypothetical
Infinite → Real / Hypothetical.

Real

Elements exist
physically

Hypothetical

Elements does not
exist physically.