

Data Basics & Sampling Principles

Monday, January 23, 2023

Data → observations, variable, and data matrices

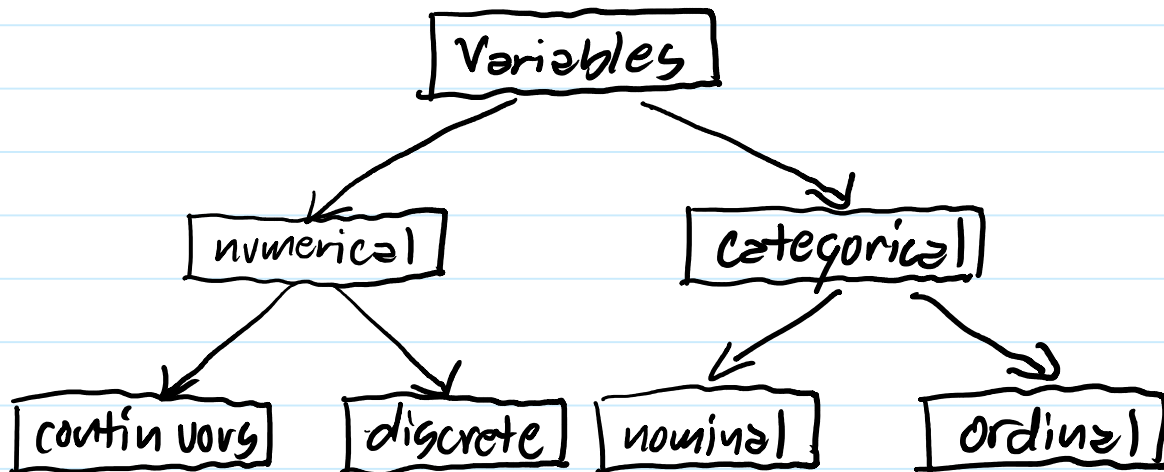
ex.

	A	B	C
1	?	?	?
2	?	?	?
3	?	?	?
4	?	?	?

3 variables A, B, C

4 observations

Types of variables



Numerical variables

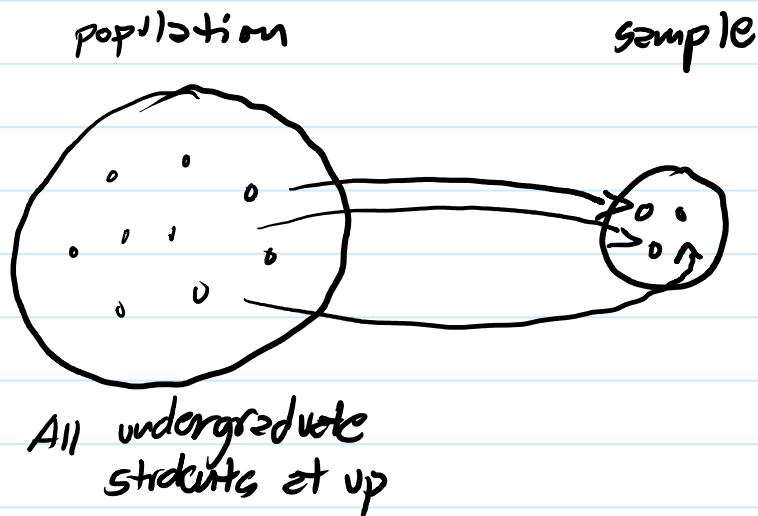
- continuous: → weight, height, length, etc.
- discrete: → number of students in a class

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number of errors in a code

Categorical variable

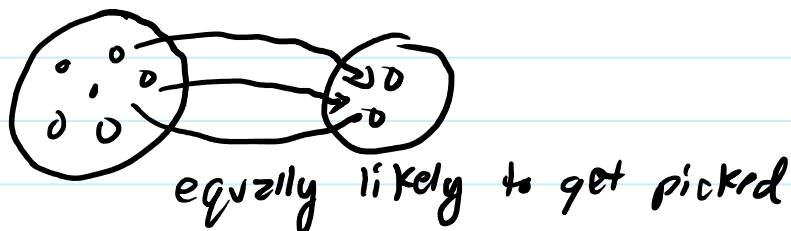
- nominal: → gender, country, color, etc.
- ordinal: → ranks

Sampling Principles



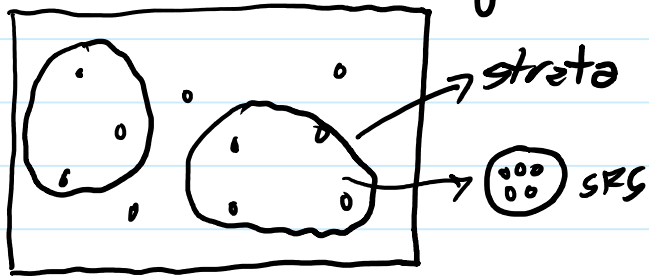
Sampling methods

- Simple random samples



- stratified sampling

stratified sampling



• Clustered sampling

