

Each scale is represented once in the list below.

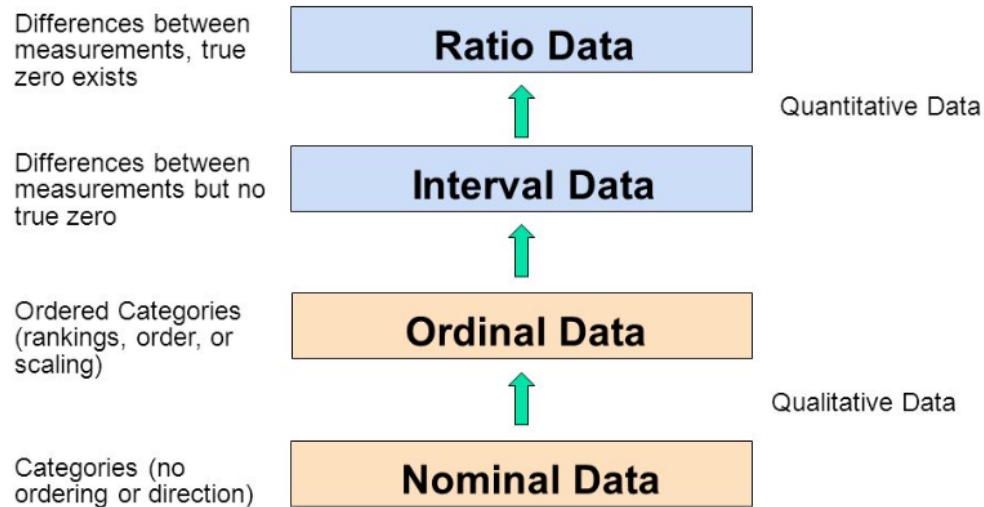
Favorite candy bar  
Weight of luggage  
Year of your birth  
Egg size (small, medium, large, extra large, jumbo)

Each scale is represented once in the list below.

Military rank  
Number of children in a family  
Jersey numbers for a football team  
Shoe size

Answers: N,R,I,O and O,R,N,I

In the 1940s, Stanley Smith Stevens introduced four scales of measurement: nominal, ordinal, interval, and ratio. These are still widely used today as a way to describe the characteristics of a variable. Knowing the scale of measurement for a variable is an important aspect in choosing the right statistical analysis.



OK to compute....	Nominal	Ordinal	Interval	Ratio
Frequency distribution	Yes	Yes	Yes	Yes
Median and percentiles	No	Yes	Yes	Yes

Add or subtract	No	No	Yes	Yes
Mean, standard deviation, standard error of the mean	No	No	Yes	Yes
Ratios, coefficient of variation	No	No	No	Yes

Data:  $\mathbb{R}^d$

-Data objects: essential part of the DB

- Data Attributes: characteristics and features for eg: { Cust\_Id, address, zip postal }: attribute vector/

feature vector

-types data :

Qualitative (cannot count)	Quantitative( count )
- Nominal: labeling variable without any numerical value Female/Male	-Discrete: cannot be divided: whole no. eg. how many children?
- Ordinal: order the variables +Not likely +Likely +Neutral +Definitely	- Continuous: can be divided : Decimal form
- Binary: Have 2 values * Symmetric: Female/Male * Asymmetric: Result	Numerical : * Interval: Order + interval: Scale 00 Hrs to 24 Hrs : 2 Hrs Adv: -ve Disadv: 0, -ve * Ratio: Ordinal+ interval+ absolute zero concept


Scale: