## Chapter 1 basics in social statistics

1) What is social statistics?
Social statistics is a set of math methods used to analyze social data,
2) What is social data
It comprises of cases and variables
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Most cases are individuals, sometimes, cases can be collective entities, such as classrooms, neighborhood, team, group, organization, party, nation/state, etc.

- 3) Variables: attributes that vary from one case to another.
- 4) Dataset

Variable 1 variable 2 variable 3 variable N

Case 1

Case 2

Case 3

Case M

- 5) Types of variables
- A) Nominal variables: variables with groups that cannot be ranked, Gender (men, women), race (white, black, Asian, Hispanics, others), region, religion etc.
- B) Ordinal variable: variables that can be ranked, but the difference between groups cannot be numerically measured/defined
  - social class (upper, upper middle, middle, working, low class, homeless)
- C) Interval/ratio variable: variables with groups that can not only be ranked, but also numerically measured, defined.Income, education, temperature, weight, height, BMI, etc.
- D)Dummy variables: variables with only two groups

Gender (men, women).

- 6) Future in data sciences
  - A) Collaborations between computer/EE and Social Sciences
  - B) Big Data
  - C) Social Network Analysis/Analytics