# Types of data

What is data?

* Collection of DATA OBJECTS and their ATTRIBUTES
* An ATTRIBUTE is a property or characteristic of an object
  + Examples: eye color of a person, temperature, etc.
  + Attribute is also known as variable, field, characteristic, dimension, or feature
* A collection of attributes describe an OBJECT
  + object is also known as record, point, case, sample, entity, or instance
* **ATTRIBUTE VALUES** are numbers or symbols assigned to an attribute for a particular object
* Distinction between attribute and attribute values
* — same attribute can be mapped to different attribute values • Example: height can be measured in feet or meters
* — different attributes can be mapped to the same set of values • Example: attribute values for ID and age are integers
* — but properties of an attribute can be different than the properties of the values used to represent the attribute