

Data

What is the data?

Data is anything. Text, Number, Image, or Video.

Types of Data

1. Quantitative/Numeric

1. Discrete Data - Counts, No fraction
 - Year, Age, Number of patients
2. Continuous Data - Measurement, Fraction
 - Weight, Height, Blood glucose level

2. Qualitative/Categorical

1. Ordinal - Order/Ranking
 - Knowledge of a disease- Poor, Moderate, Good
 - Rating of a product - 1/2/3/4/5
2. Nominal - No ranking/order
 - Gender - Male/Female
 - Blood group - A/B/AB/O
3. **Binary/Binomial** - Yes/No, 1/0
 - Smoker - Yes/No
 - Hypertension - Yes/No

Participant	Age	Gender	Height	Weight
-------------	-----	--------	--------	--------

Data Set/Data frame

Participant	Age	Gender	Height	Weight
A	27	Male	170	155
B	30	Female	150	180
C	35	Male	190	170

Columns and Rows

- Columns are called Variable
- Rows are called Sample/Observant

Functions

- A function is a particular piece of code that allows you to do something in R
- A functions are either built in R or comes from installing additional packages

Arguments/Parameters

- What you pass to a function

Package

- Bundle of code that can be loaded together and share with others
- Analogous to software application
- Package can be installed through `install.package("package_name")`
- Package can be uninstalled through `remove.packages("package_name")`
- All the installed packages can be seen through `installed.packages()[, "Package"]`
- Package can be called through `library(package_name)`