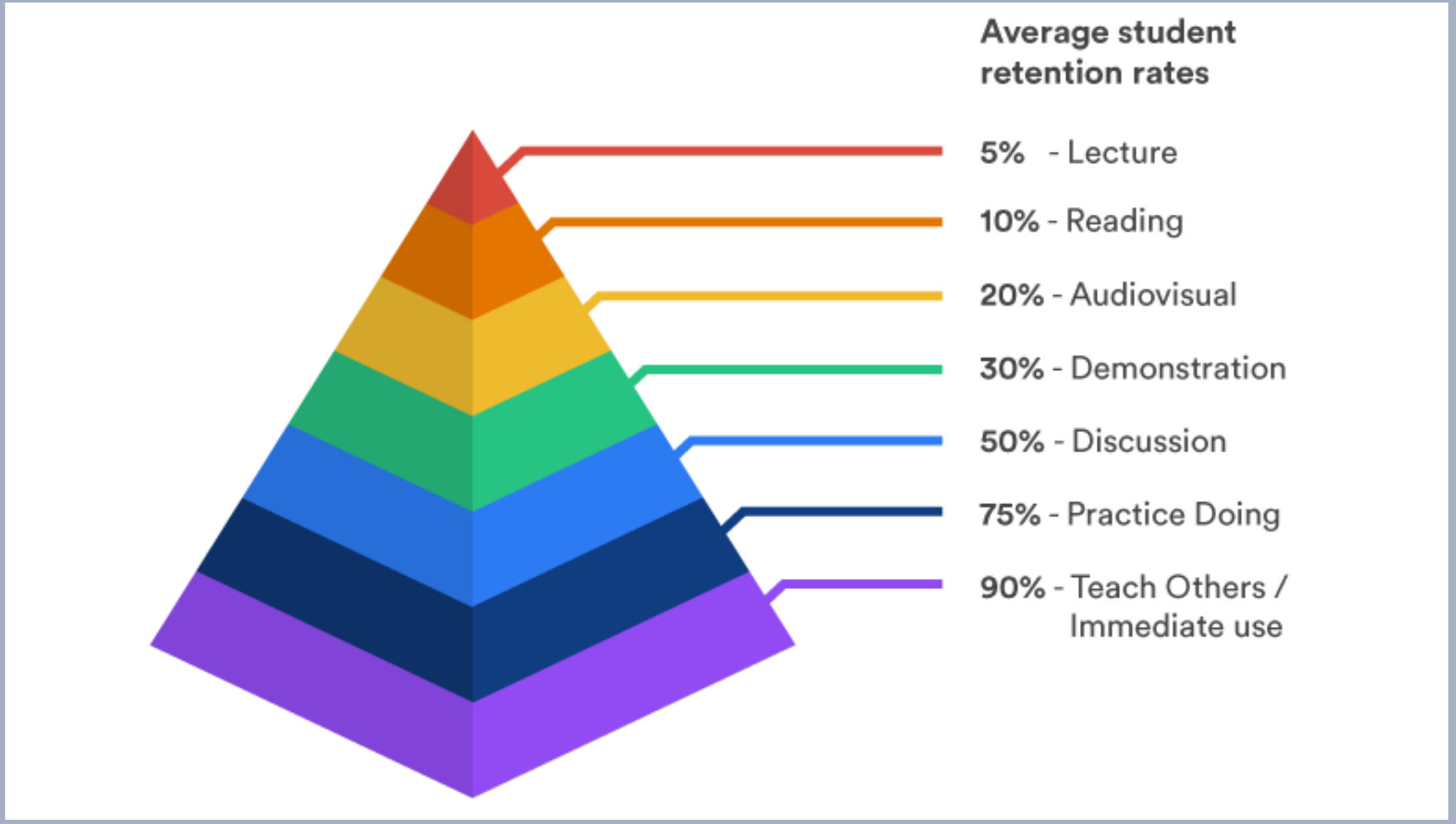
> R You Ready?

INTRODUCTION TO R

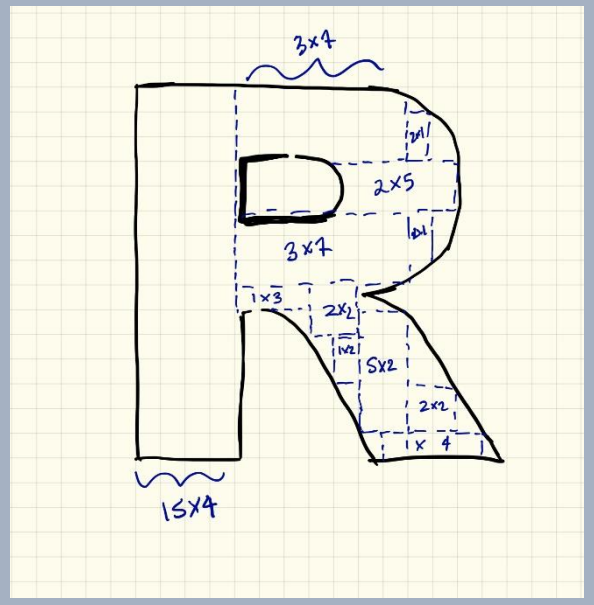
Learning Pyramid



WHILE WE TEACH, WE LEARN.

SENECA

What is R?



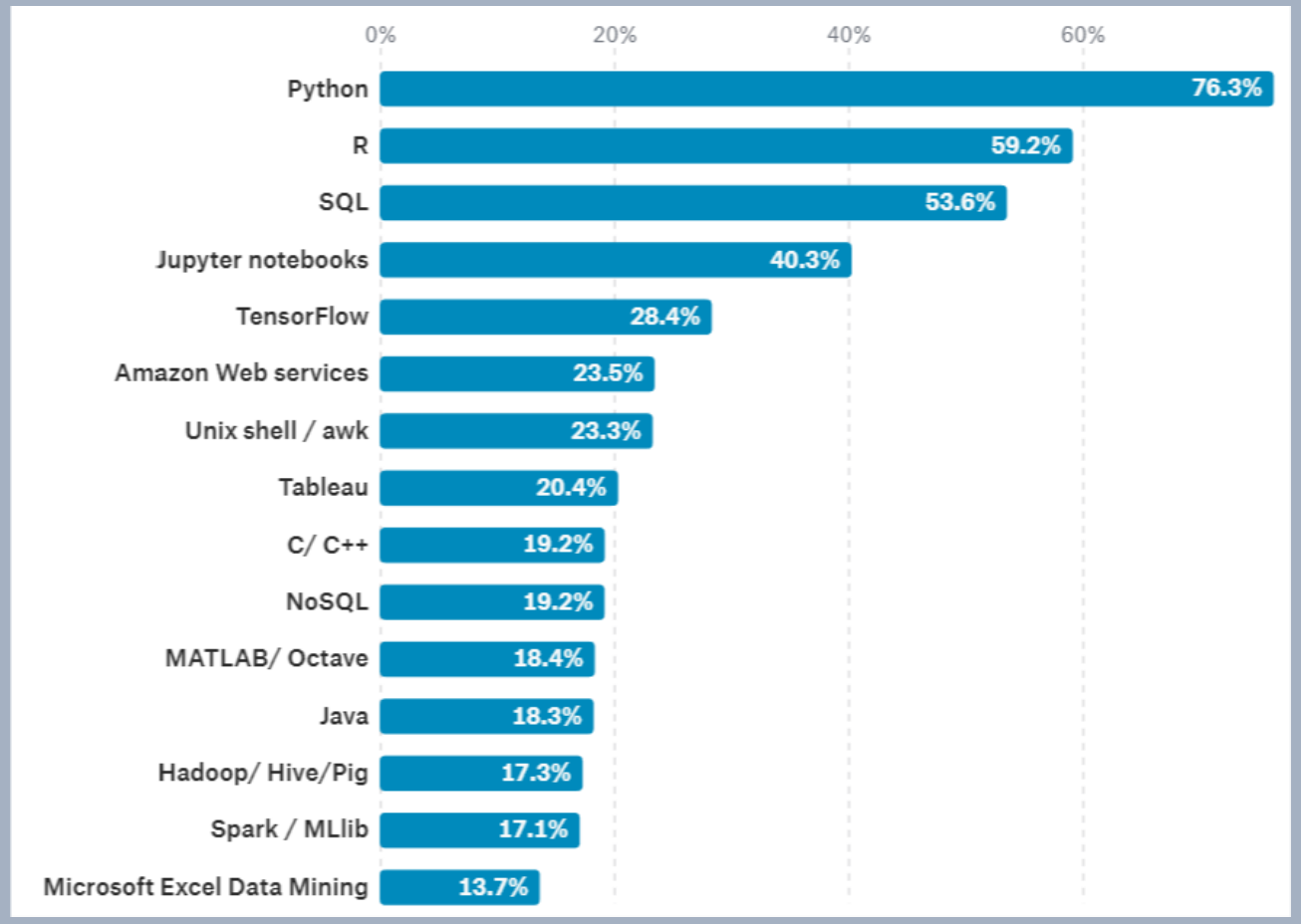
A freely available language and environment for statistical computing and graphics which provides a wide variety of statistical and graphical techniques

https://www.r-project.org/

- Developed by Ross Ihaka and Robert Gentleman at University of Auckland
- First appeared Aug 1993; 25 years ago
- Some capabilities of R include:

> Software development
> Data analysis and visualization
> Text processing
> Image processing
> Interact with APIs
> Building interactive web apps
> Writing project report or book
> Creating presentations

What tools are used at work?



Kaggle's The State of Data Science 2017
https://www.kaggle.com/surveys/2017

What are R and RStudio?

R: Engine

RStudio: Dashboard

Using R via RStudio

R: Do not open this

RStudio: Open this

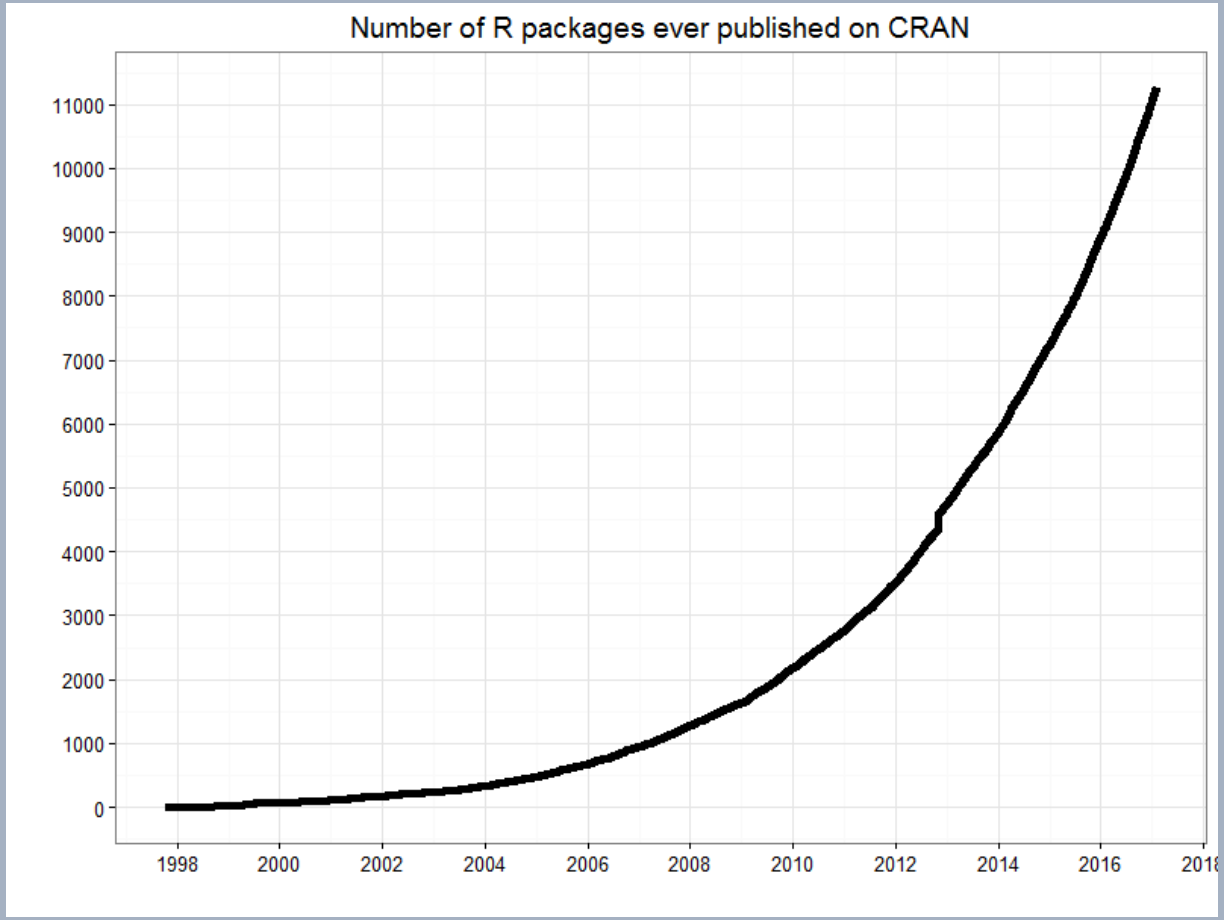
What are R packages?

R: A new phone

GET IT ON Google Play

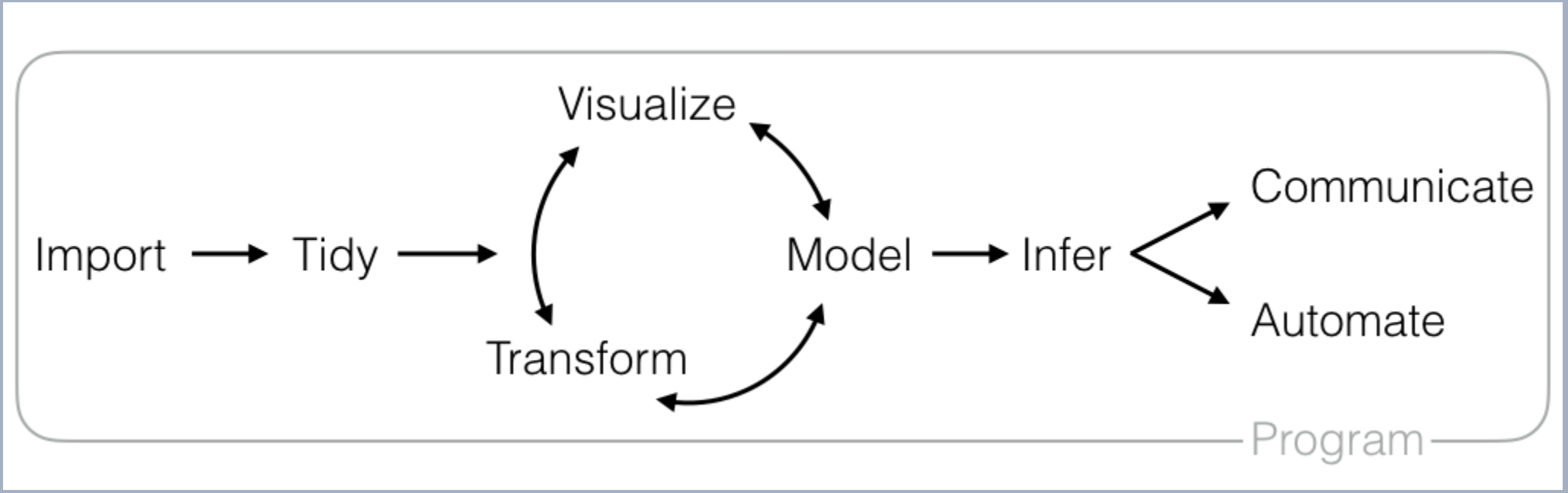
Download on the App Store

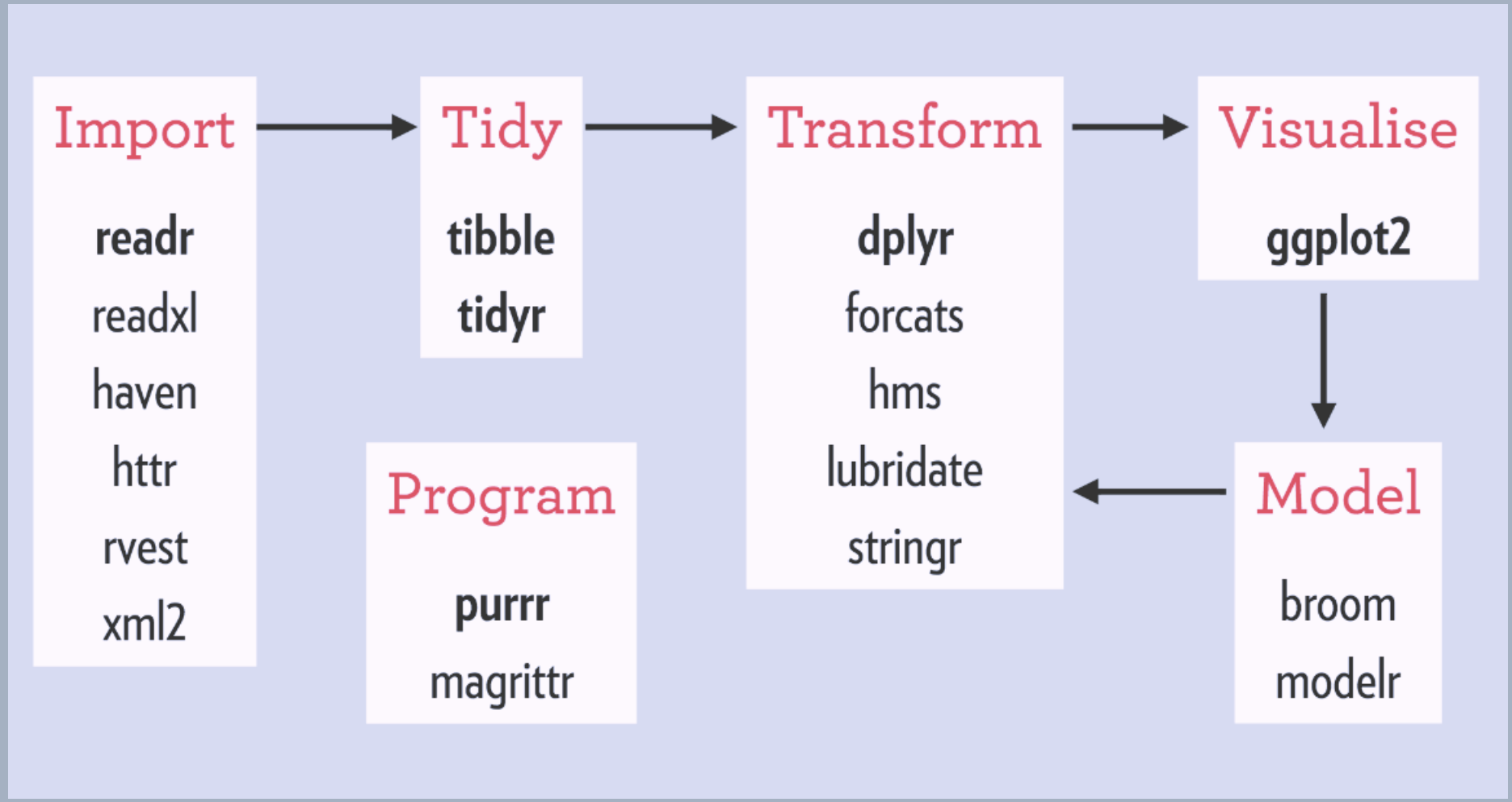
R Packages: Apps you can download



Currently, the CRAN package repository features **13529** available packages:
https://cran.r-project.org/web/packages/

Data Science Workflow

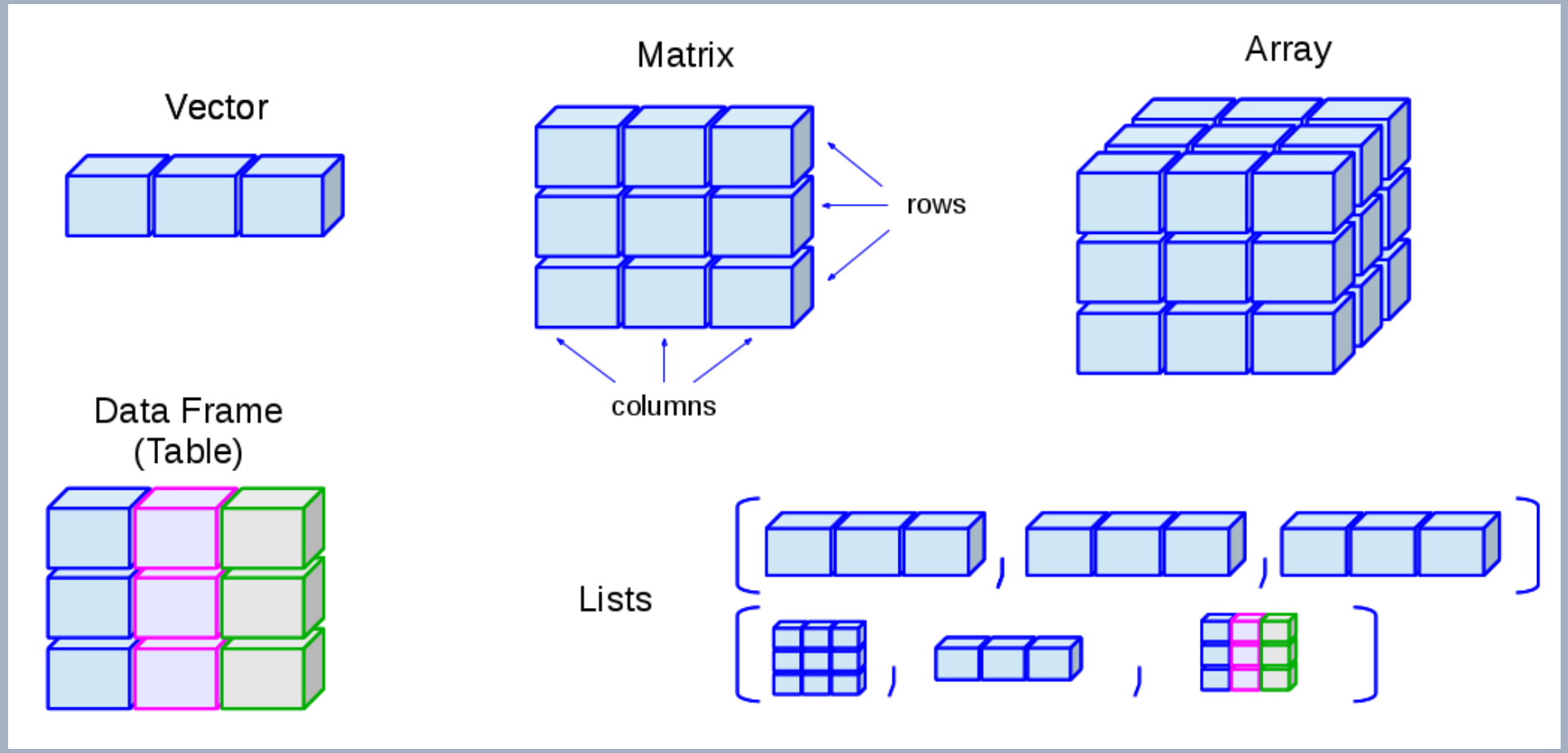



Import
readr
readxl
haven
httr
rvest
xml2
Tidy
tibble
tidyr
Transform
dplyr
forcats
hms
lubridate
stringr
Visualise
ggplot2
Model
broom
modelr
Program
purrr
magrittr

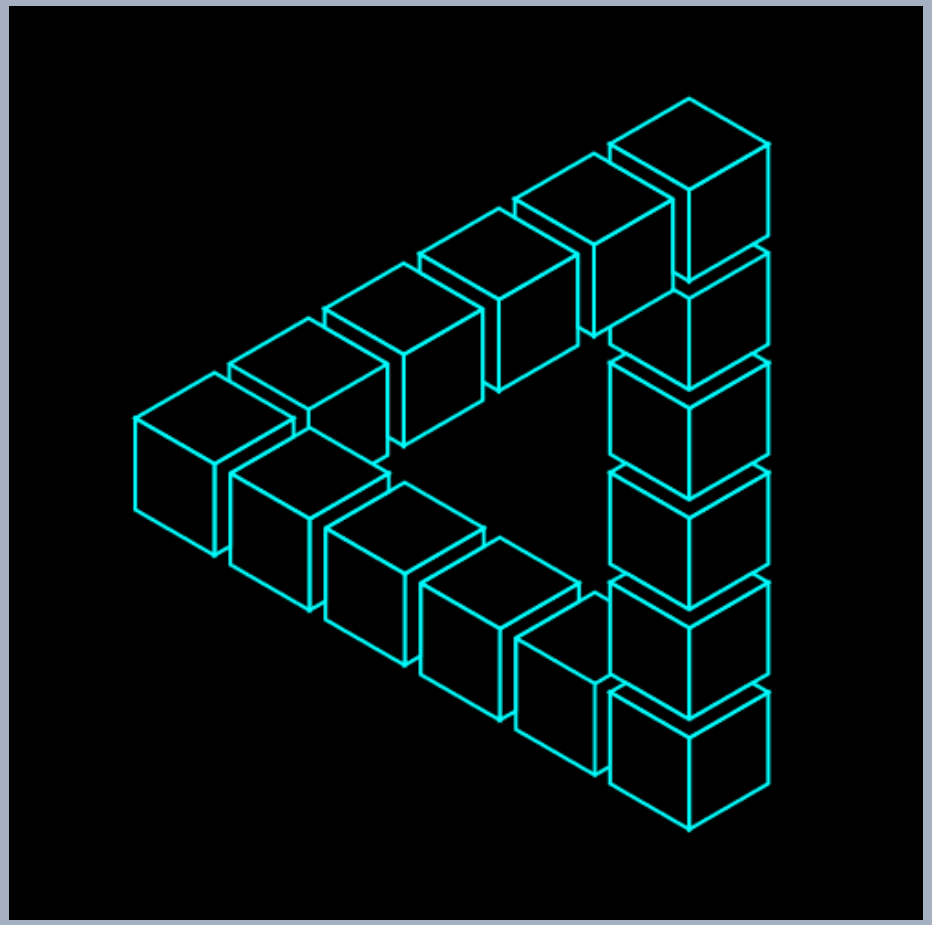
Basic Data Types in R

Data Type	Stores
character	strings
numeric	integers or double
integer	integers
complex	Complex numbers
logical	TRUE or FALSE

Data Structures in R



How do I code in R?



Further Resources

- Introduction to R - https://www.datacamp.com/courses/free-introduction-to-r
- Introduction to the Tidyverse - https://www.datacamp.com/courses/introduction-to-the-tidyverse
- R Programming A-Z™ - https://www.udemy.com/r-programming/
- R for Data Science - Garrett Grolemund & Hadley Wickham - https://r4ds.had.co.nz/
- Cheat Sheets - https://www.rstudio.com/resources/cheatsheets/

THANK YOU