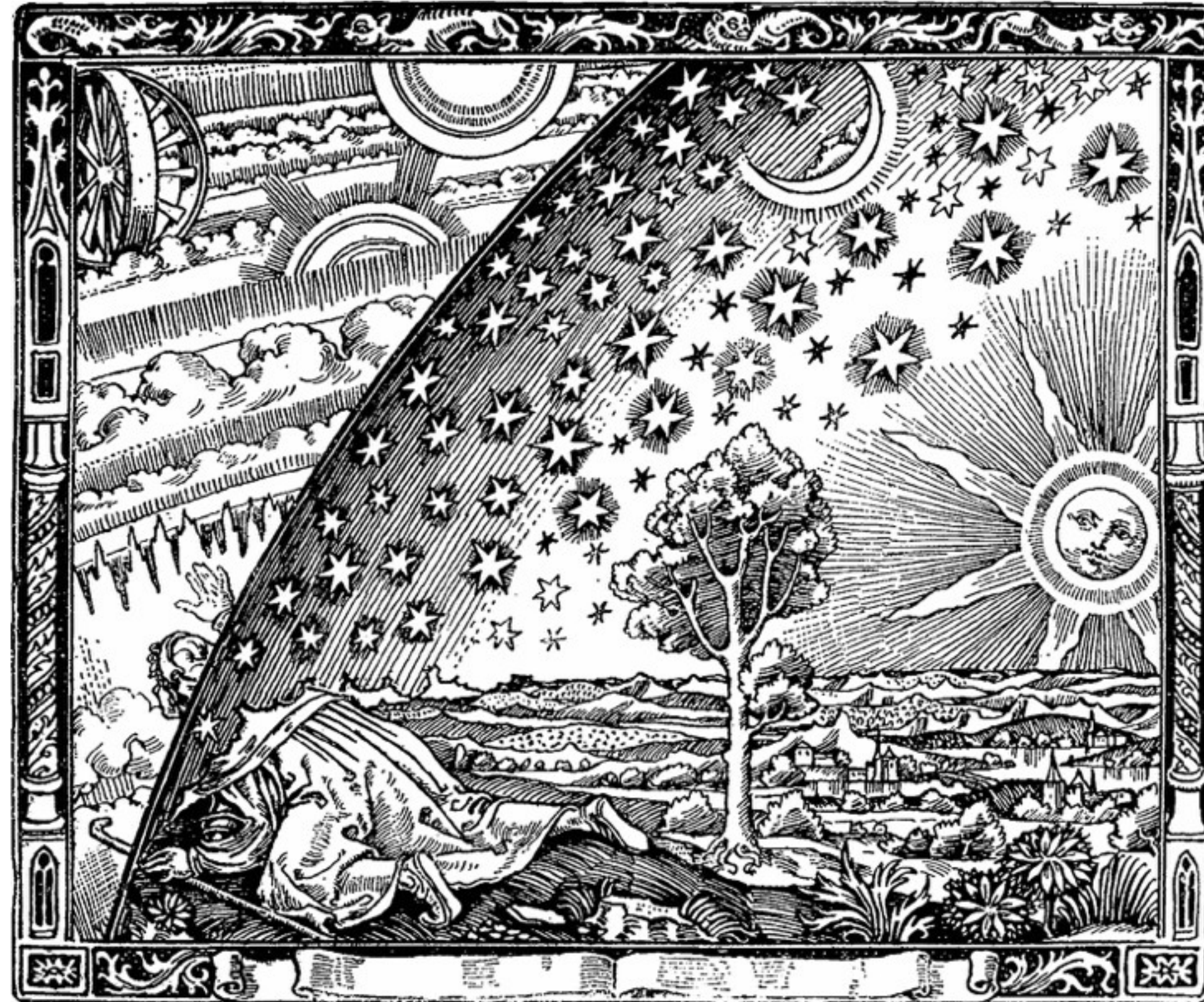# Master the Tidyverse

Petr Šimeček

Senior ML Engineer @ CEAi
November 2019

HELLO
my name is

Petr

@simecek, @python_tip

Your Turn

Form groups of 2-3 people. Introduce yourself to your group members. Tell them:

1. Who you are

2. What you do with data

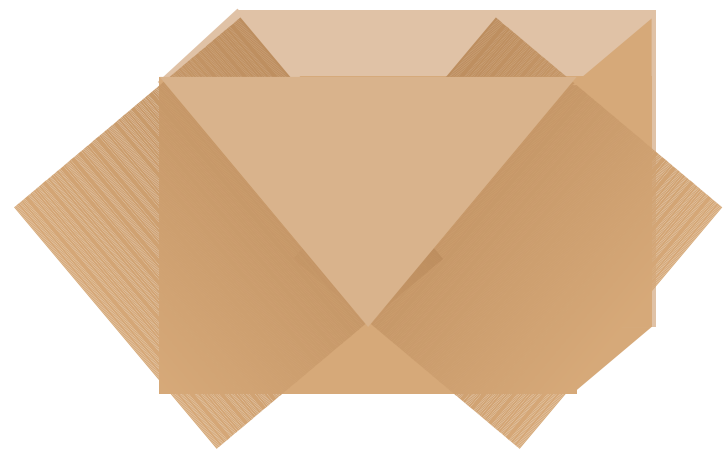3. How long you have been using R

05:00

R in

HISTORY

with Brittany Rose

tidyverse

An R package that serves as a short cut for Installing and loading the components of the tidyverse.

```
install.packages("tidyverse")
```

does the equivalent of

```
install.packages("ggplot2")
install.packages("dplyr")
install.packages("tidyr")
install.packages("readr")
install.packages("purrr")
install.packages("tibble")
install.packages("hms")
install.packages("stringr")
install.packages("lubridate")
install.packages("forcats")
install.packages("DBI")
install.packages("haven")
install.packages("httr")
install.packages("jsonlite")
install.packages("readxl")
install.packages("rvest")
install.packages("xml2")
install.packages("modelr")
install.packages("broom")
```

```
install.packages("tidyverse")
```
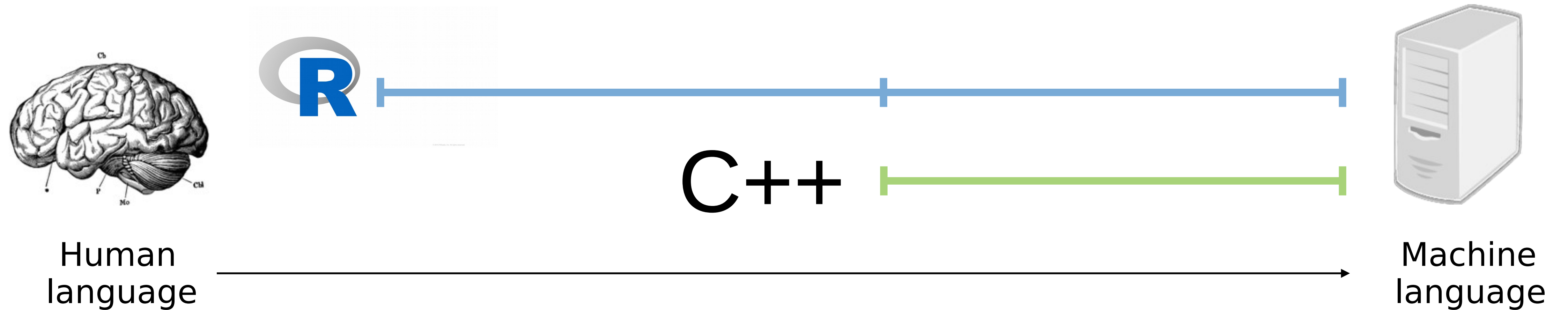
does the equivalent of

```
install.packages("ggplot2")
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install.packages("tidyr")
install.packages("readr")
install.packages("purrr")
install.packages("tibble")
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```
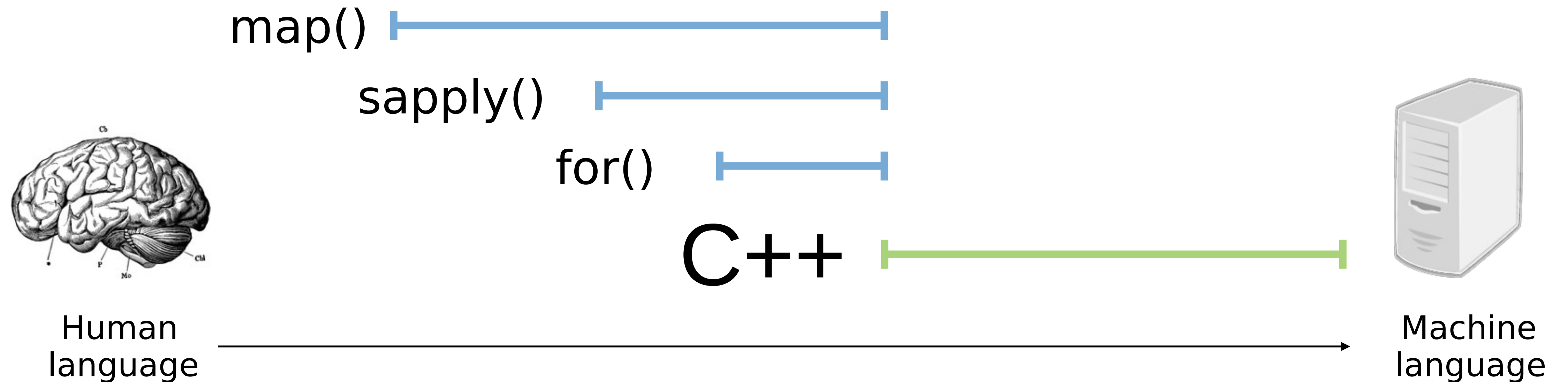
```
library("tidyverse")
```
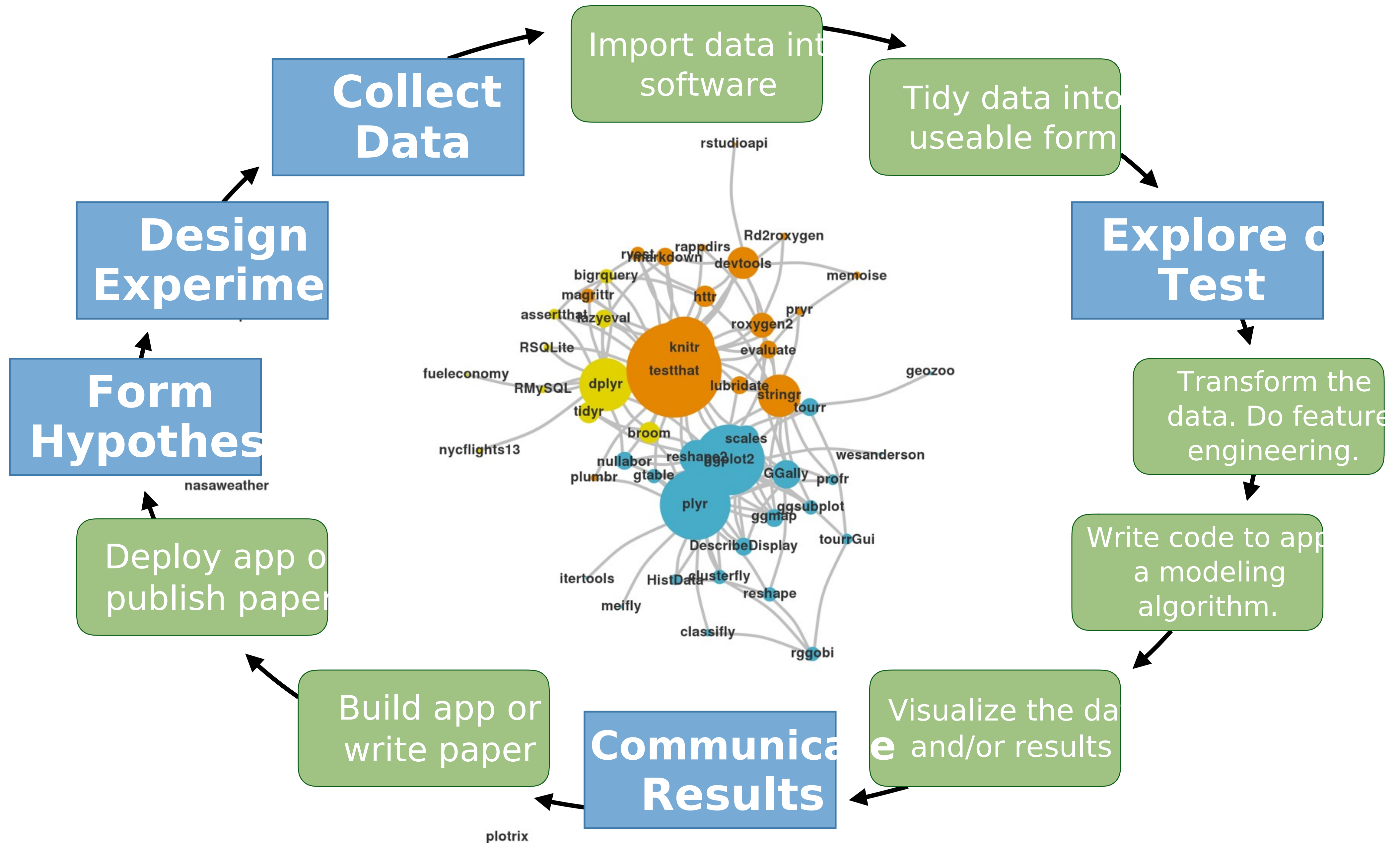
does the equivalent of

```
library("ggplot2")
library("dplyr")
library("tidyr")
library("readr")
library("purrr")
library("tibble")
```

R - A computer language for scientists

Human language

Machine language

R - A computer language for scientists

map()

sapply()

for()

C++

Human
language

Machine
language

Collect
Data

Design
Experime

Form
Hypothes

Import data int
software

Tidy data into
useable form

Explore c
Test

Transform the
data. Do feature
engineering.

Write code to app
a modeling
algorithm.

Deploy app o
publish paper

Build app or
write paper

Communica e
Results

Visualize the da
and/or results

rstudioapi
Rd2roxygen
rappdirs
rMarkdown devtools
memoise
bigrquery httr pryr
magrittr roxygen2
assertthat lazyeval
RSQLite evaluate
knitr
fueleconomy testthat geozoo
dplyr lubridate
RMySQL stringr
tidyr tourr
broom
scales
nycflights13 wesanderson
reshape2 plot2
nullabor GGally profr
plumbr gtable
plyr ggsubplot
ggmap
DescribeDisplay tourrGui
HistData clusterfly
itertools reshape
meifly
classifly
rggobi

nasaweather

plotrix

Coding = Climbing A Mountain
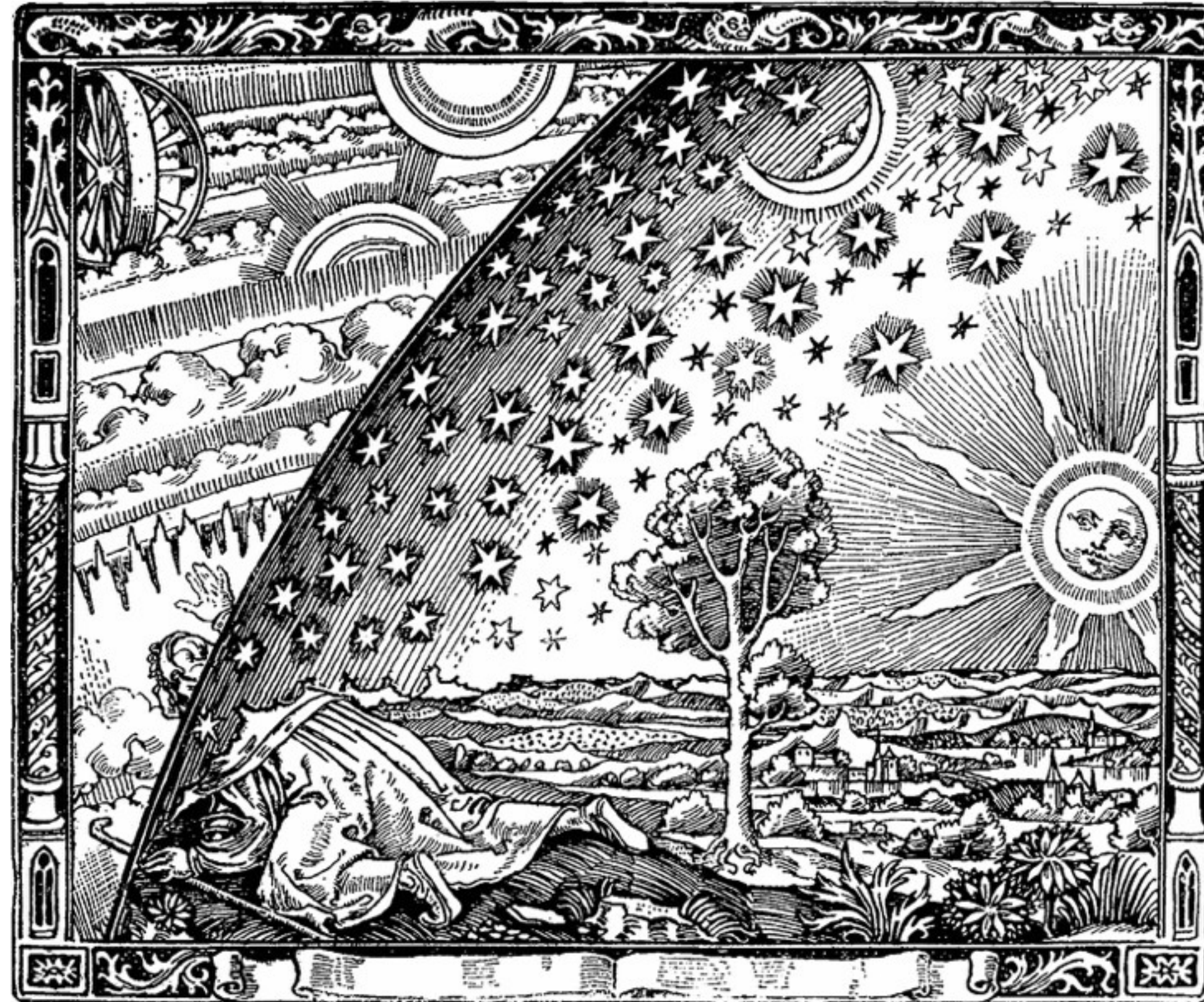

Coding = Falling Into A Pit (Of Success)

Your Turn

Individually:

Run the code below to load the core tidyverse packages, including ggplot2, dplyr, and tidyr.

library(tidyverse)

Download materials to your local machine or use RStudio Cloud: **http://bit.ly/tidyverse0411**

Master the Tidyverse

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