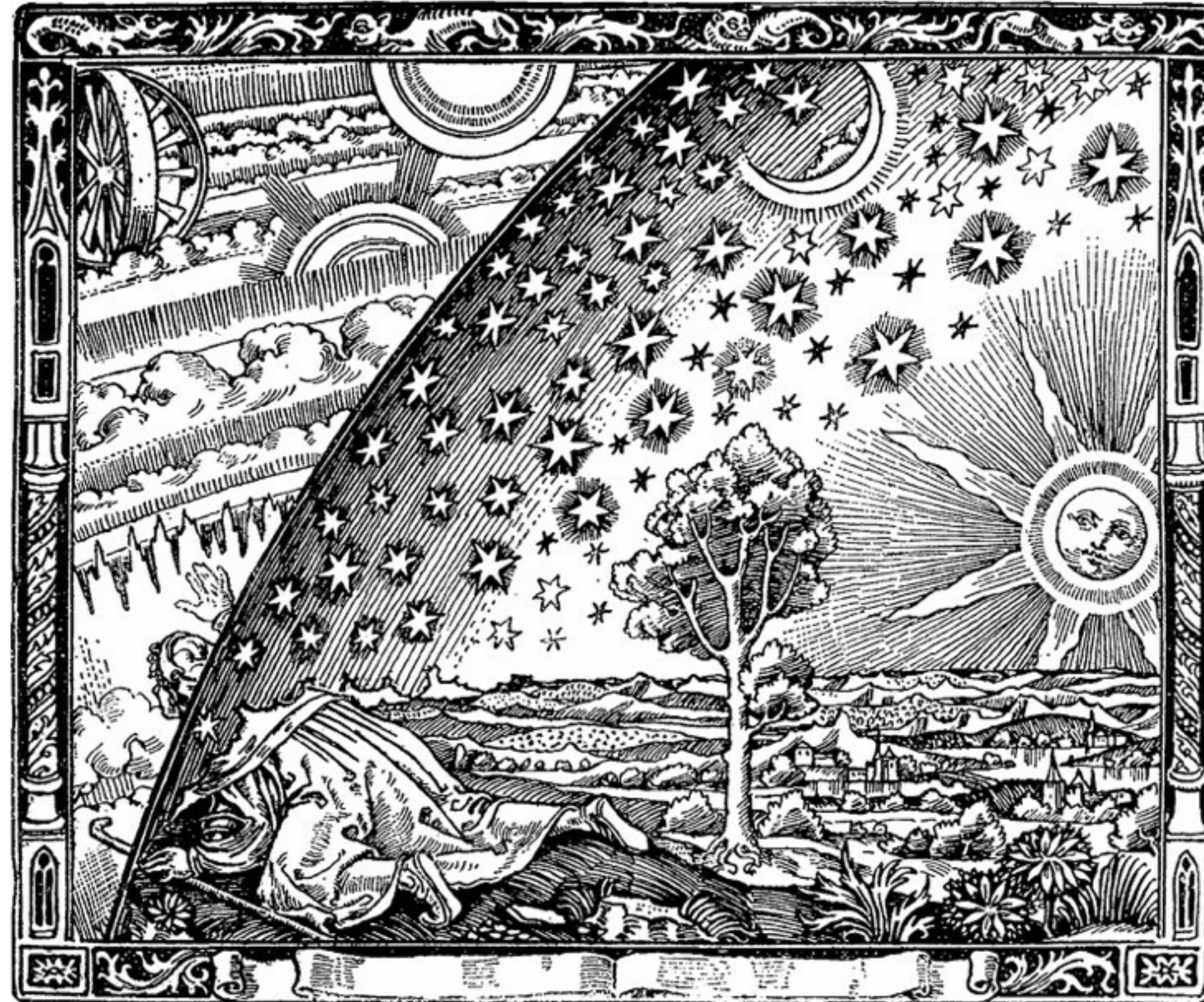# Master the Tidyverse

Petr Šimeček
Senior ML Engineer @ CEAi
December 2019

HELLO
my name is
**Petr**

@simecek, @python_tip

**HELLO**

my name is

# Karla

@karlafej, @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.

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

does the equivalent of

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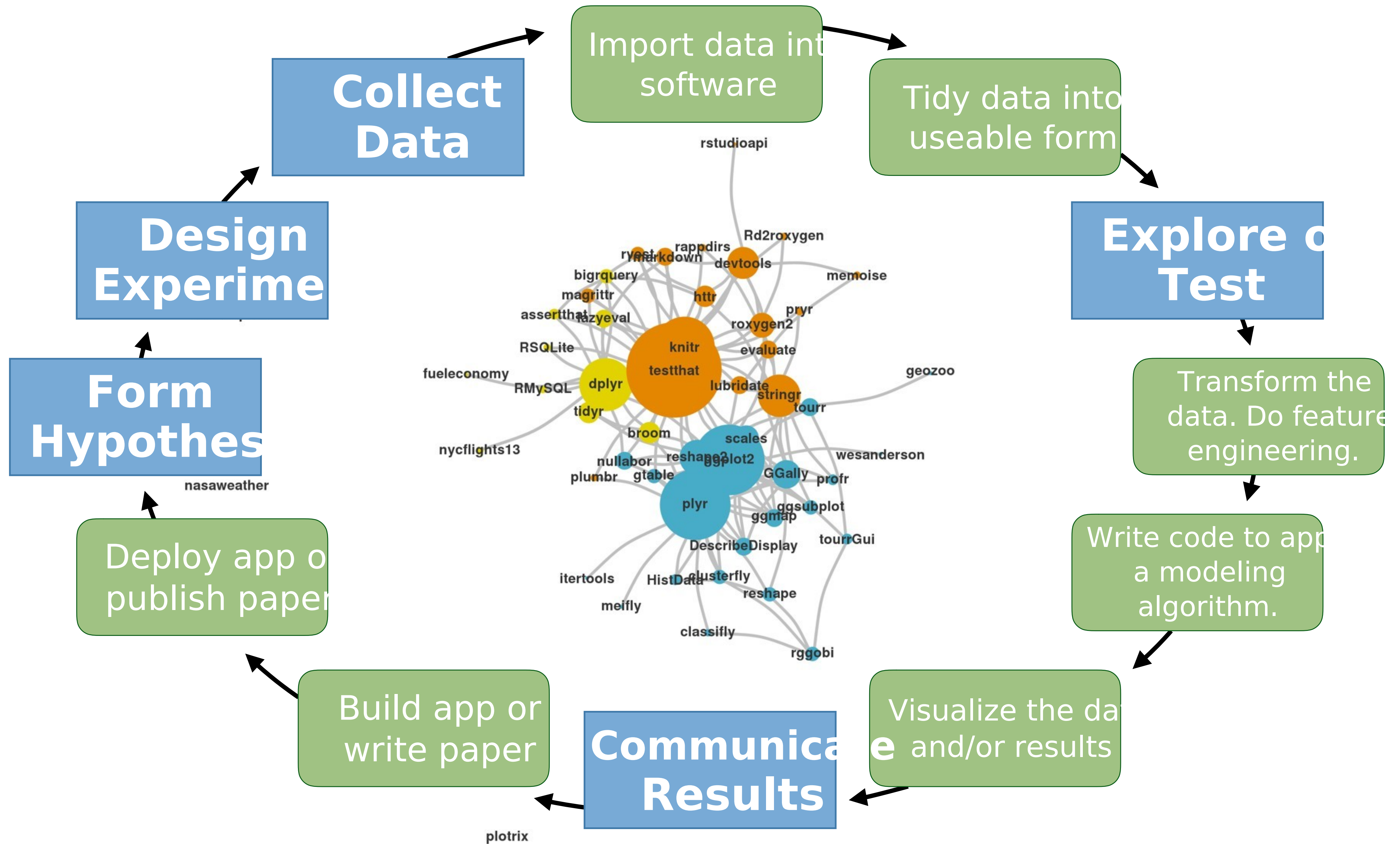
```
install.packages("tidyverse")
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does the equivalent of

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install.packages("readxl")
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install.packages("modelr")
install.packages("broom")
```
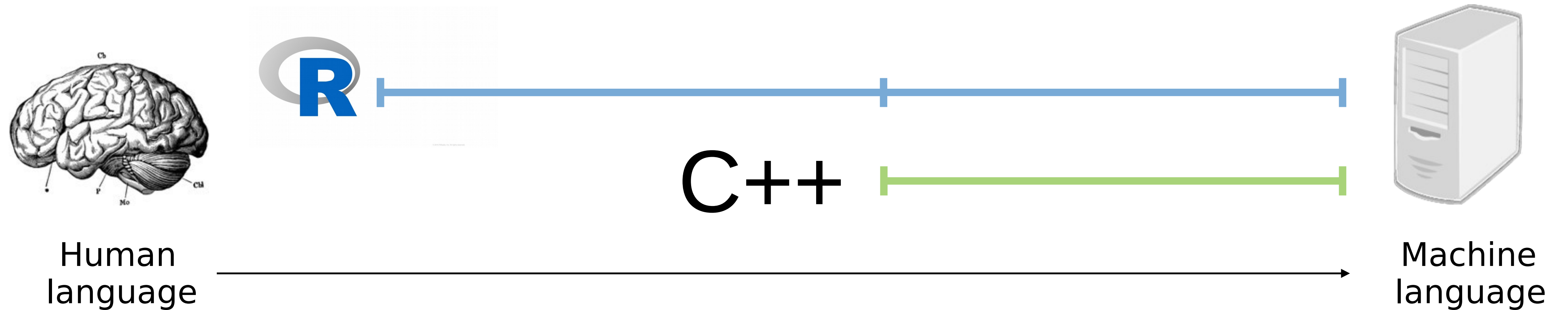
```
library("tidyverse")
```
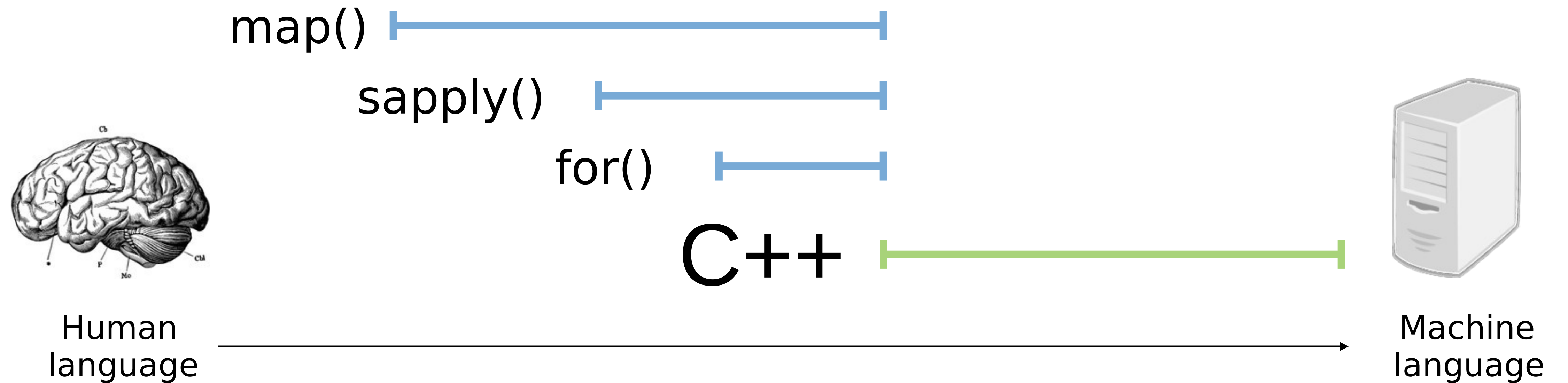
does the equivalent of

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

Collect
Data

Import data int
software

Tidy data into
useable form

Design
Experime

Explore c
Test

Form
Hypothes

Transform the
data. Do feature
engineering.

Deploy app o
publish paper

Write code to app
a modeling
algorithm.

Build app or
write paper

Communica e
Results

Visualize the da
and/or results

rstudioapi
Rd2roxygen
rmarkdown rappdirs devtools memoise
bigrquery httr pryr
magrittr roxygen2
assertthat lazyeval
RSQLite knitr evaluate
testthat geozoo
fueleconomy lubridate
RMySQL dplyr stringr
tidyr tourr
broom scales
nycflights13 reshape2 plot2 wesanderson
nullabor ggplot2 GGally profr
plumbr gtable ggsubplot
nasaweather plyr ggmap
DescribeDisplay tourrGui
itertools HistData clusterfly
meifly reshape
classifly
plotrix rggobi

# **R** - A computer language for scientists



Human
language

C++

Machine
language

# **R** - A computer language for scientists

map()

sapply()

for()

C++

Human
language

Machine
language

# Coding = Climbing A Mountain
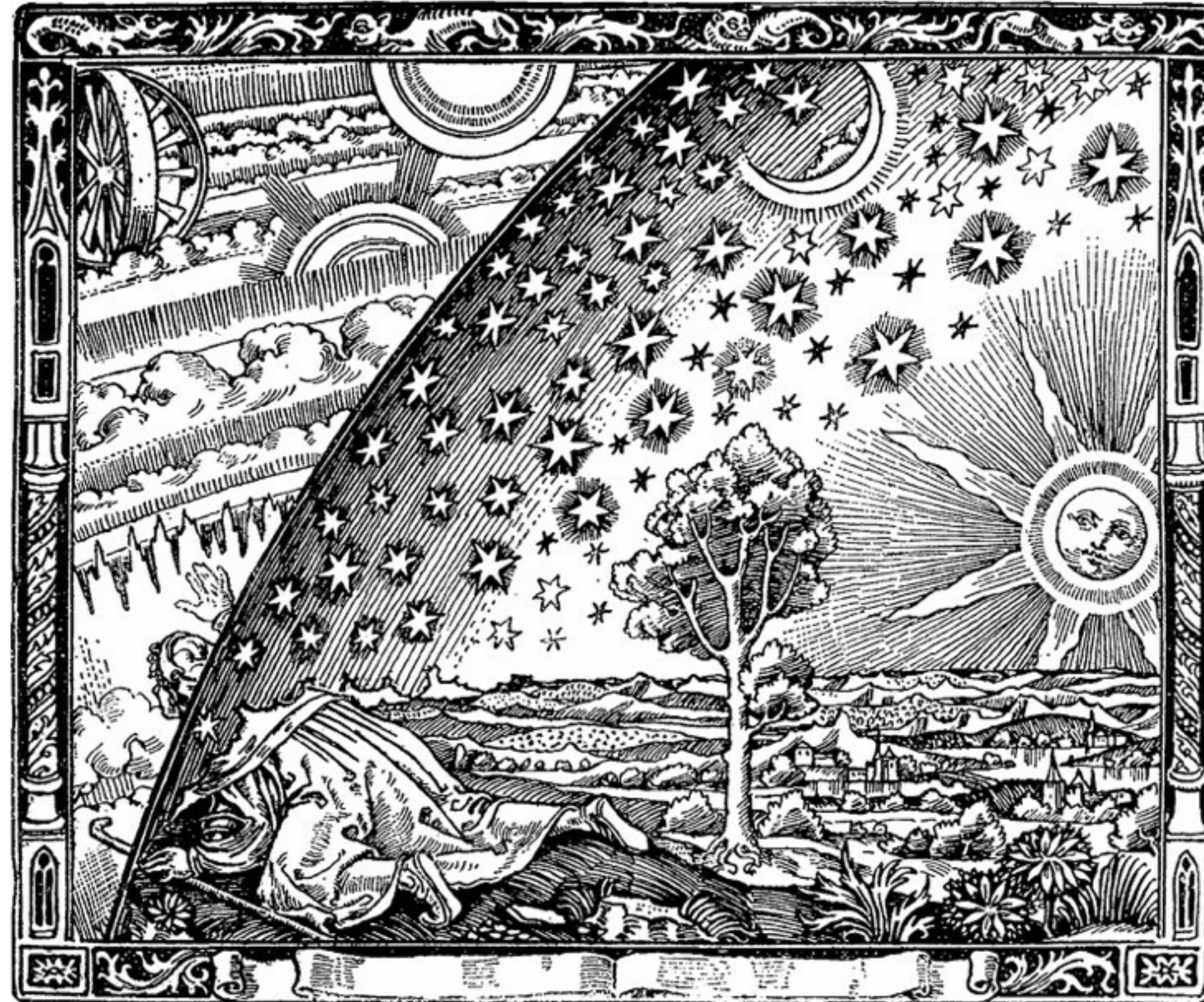


# Coding = Falling Into A Pit (Of Success)

# 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/tidyverse1112**

# Master the Tidyverse



Petr Šimeček
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November 2019