R and Python

Intergration

One of the coolest things about some of the latest RStudio versions is the intergration between R and Python.

For example, you can not only run some Python in RStudio as you can see from the `example.py` script. You can also run both R and Python in the same RMarkdown document!

```r
library(tidyverse)
```
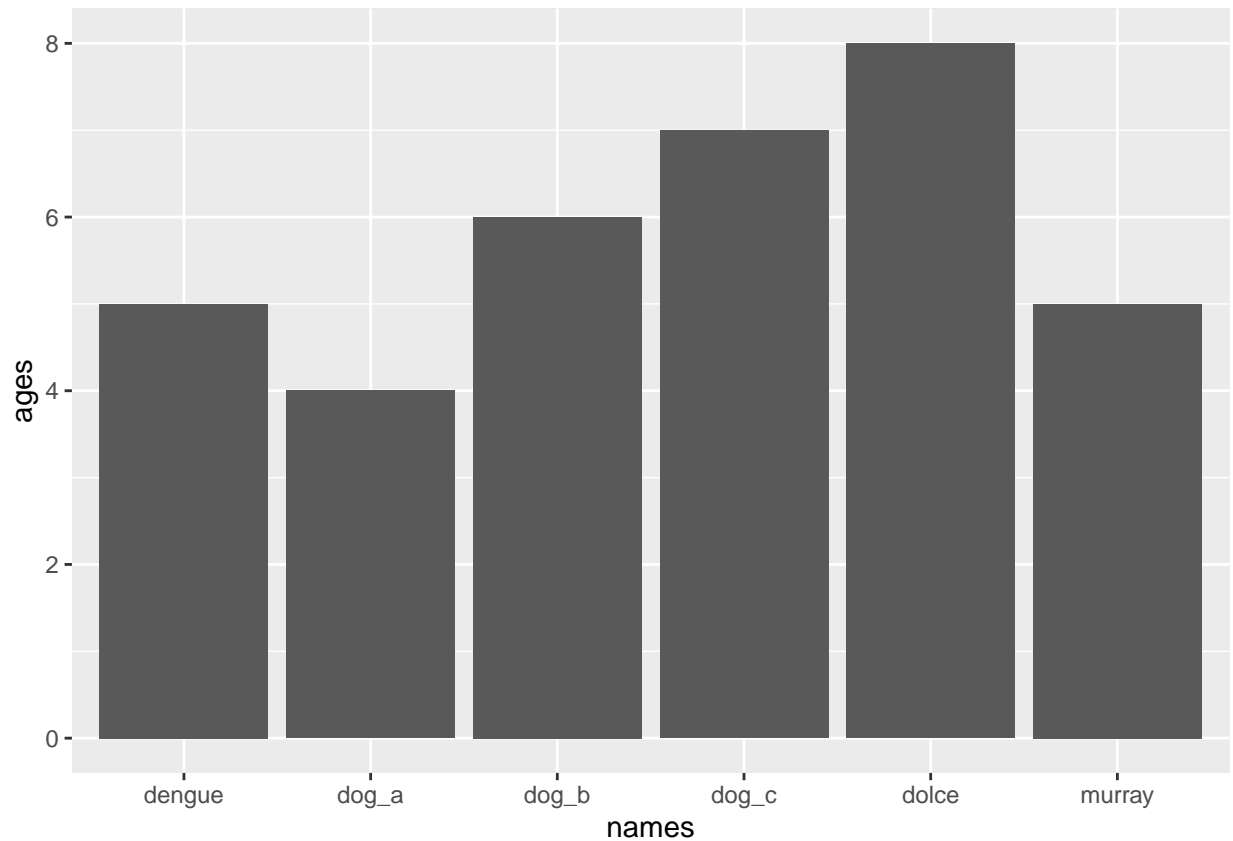
```
## -- Attaching packages --------------------------------------------------------

## v ggplot2 3.2.1      v purrr   0.3.2
## v tibble  2.1.3      v dplyr   0.8.3
## v tidyr   1.0.0      v stringr 1.4.0
## v readr   1.3.1      v forcats 0.4.0

## -- Conflicts -----------------------------------------------------------------
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```r
dog_table <- tibble(
  names = c("dengue", "dolce", "murray", "dog_a", "dog_b", "dog_c"),
  ages = c(5, 8, 5, 4, 6, 7)
)

dog_table %>%
  ggplot(aes(x = names, y = ages)) +
  geom_bar(stat = "identity")
```

```python
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
# Set plot space as inline for inline plots display

# an example of a bar plot
ax = plt.subplot() # create an axis object, which the plot object which we can customize
our_dogs = ["dengue", "dolce", "murray", "dog_a", "dog_b", "dog_c"]
dogs_age = [5, 8, 5, 4, 6, 7]

plt.bar(range(len(our_dogs)), dogs_age)
```

```
## <BarContainer object of 6 artists>
```

```python
ax.set_xticks(range(0,len(our_dogs))) # set ticks values, as a method of the axes
```

```
## [<matplotlib.axis.XTick object at 0x11a282390>, <matplotlib.axis.XTick object at 0x11bf65c88>, <matpl
```

```python
ax.set_xticklabels(our_dogs) # set tick labels, also as a method of the axes
```

```
## [Text(0,0,'dengue'), Text(0,0,'dolce'), Text(0,0,'murray'), Text(0,0,'dog_a'), Text(0,0,'dog_b'), Te
```

```python
plt.title('Age of Random Dogs')
plt.xlabel('Dogs')
plt.ylabel('Age')
plt.show()
```


Age of Random Dogs