## Francesca System 2 Code Samples

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First, we must define the **path** to the .py file. This is best defined as a local path with the location of the file calling the command as the starting point. For example, if this file is located in the same folder as a "Scripts" folder that contains the program I wish to run (in this case we will call it make\_cov.py), the path would be defined as follows:

```
path_to_py <- "Scripts/make_cov.py"</pre>
```

This variable will later be passed to the system2 command as a string.

The goal of the system2 command is to mimic the command line. For example, say I have the following script written in Scripts/print\_names.py:

```
import string

names = ["Frank", "Alex", "Wenting", "Rebecca", "Genovese", "Francesca"]

for person in names:
    print("A person named %s in the array!" % person)

print("We have finished the script!")
```

If we were to run the script from the command line interface, we would run the following command:

```
python Scripts/print_names.py
```

```
## A person named Frank in the array!
## A person named Alex in the array!
## A person named Wenting in the array!
## A person named Rebecca in the array!
## A person named Genovese in the array!
## A person named Francesca in the array!
## We have finished the script!
```

To run such a command from native R, we may make use of the system2 command. To illustrate this example, consider the output from the following example:

```
system2("python", args = c("Scripts/print_names.py"), stdout = TRUE)
```

```
## [1] "A person named Frank in the array!"
## [2] "A person named Alex in the array!"
## [3] "A person named Wenting in the array!"
## [4] "A person named Rebecca in the array!"
## [5] "A person named Genovese in the array!"
## [6] "A person named Francesca in the array!"
## [7] "We have finished the script!"
```