

Functional Programming in R

Functions in R

- ▶ Functions in R are treated just like any other data.
- ▶ They are assigned to variables just like any other object.
- ▶ They can be passed to other functions as arguments and returned by other functions as output.
- ▶ They can also be anonymous, meaning they can be passed as an argument without being assigned to a variable.

for loops

You are probably used to for loops:

```
myData <- c(1, 2, 3, 4, 5)
for(i in 1:length(myData)){
  myData[i] <- myData[i] + 1
}
myData
```

parallel

Now that you are thinking functionally, imagine this:

A list of elements.

A single function.

Assign a portion of those elements to each core and apply the function to those grouped elements.

Re-assemble those elements once they are complete.