1. If Newlist <- list(a=1:10, b="Good morning", c="Hi"), write an R statement that will add 1 to each element of the first vector in Newlist.

Code	Solution
Newlist <- list(a=1:10, b="Good morning", c="Hi") Newlist$a+1	> Newlist <- list(a=1:10, b="Good morning", c="Hi") > Newlist$a+1 [1] 2 3 4 5 6 7 8 9 10 11

2. Let x <- list(a=5:10, c="Hello", d="AA"), write an R statement to add a new item z = "NewItem" to the list x

Code	Solution
x <- list(a=5:10, c="Hello", d="AA") x$z<-"NewItem" x	> x <- list(a=5:10, c="Hello", d="AA") > x$z<-"NewItem" > x $a [1] 5 6 7 8 9 10 $c [1] "Hello" $d [1] "AA" $z [1] "NewItem"

3. Consider y <- list("a", "b", "c"), write an R statement that will assign new names "one", "two" and "three" to the elements of y

code	solution
y <- list("a", "b", "c") names(y)<-c("one", "two", "three") y	> y <- list("a", "b", "c") > names(y)<-c("one", "two", "three") > y $one [1] "a" $two [1] "b" $three [1] "c"

4. DerivativeFunction <- function(x) { log10(x) + 1

Apply the “DerivativeFunction” to list1