Exercise 1.1

Interacting with R

useful functions: `c()`, `ls()`, `rm()`, `objects()`

*** 01. Open Rstudio and perform an arithmetic calculation in the command line.**

```
1 + 1
```

```
## [1] 2
```

```
2 * 8
```

```
## [1] 16
```

*** 02. Create a numeric vector in the command line containing:**

- the numbers 2, 9, 3, 8, and 3 and assign this vector to a global variable x.

```
x = c(2,9,3,8,3)
x
```

```
## [1] 2 9 3 8 3
```

- Perform arithmetic with x.

```
x + 2000
```

```
## [1] 2002 2009 2003 2008 2003
```

- Convince yourself R works as a calculator, and knows order of operations.

```
1 + 3 * 10^2
```

```
## [1] 301
```

- Multiply x by 10, and save the result as a new object named y

```
y = x * 10
```

- Calculate the difference in the sum of the x vector and the sum of the y vector

```
sum(x) - sum(y)
```

```
## [1] -225
```

03. Call the help files for the functions ls() and rm()

```
?ls
help(ls)
```

- What are the arguments for the ls() function?

The arguments for the ls() function are: name, pos, envir, all.names, pattern, and sorted.

- What does the 'sorted' argument do?

The sorted argument takes a logical value, which denotes whether the vector should be sorted alphabetically or not. By default, ls() uses sorted=TRUE.

04. List all objects in the global environment.

```
ls()
```

```
## [1] "x" "y"
```

- Remove x and y from the global environment.

```
rm(x)
rm(y)
```