Practical 3

Jumping Rivers

Question 1

```
Fun4 = function(x) {
    if (x == 5) {
        y = 0
    } else {
        y = 1
    }
    return(y)
}
```

Change Fun4 so that it:

- returns 1 if x is positive;
- returns -1 if x is negative;
- returns 0 if x is zero.

Question 2

In practical 1, we did captured both the mean of each column in a sample data frame.

```
dd = data.frame(x = rnorm(10), y = rnorm(10),
    z = rnorm(10))
means = numeric(ncol(dd))
for (i in seq_along(dd)) {
    means[i] = mean(dd[, i])
}
```

The message() command provides us with an easier-to-use, more readable alternative to using print(). For instance,

```
x = 5
message("The value of x is ", x)
## The value of x is 5
```

- 1. Change the for loop such that it returns a warning message every time the mean goes above 0.3. The message should say "Warning, mean is greater than 0.3".
- 2. Change the message such that it also tells us the column number of a large mean. For instance, if the mean of columns 2 was > 0.3, it would say "Warning, the mean of column 2 is greater than 0.3"
- 3. Convert the code into a function that takes two arguments, the data frame and the limit of the mean.

Solutions

Solutions are contained within this package:

```
vignette("solutions3", package = "jrProgramming")
```