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")
```