

Exercises

First Steps

Exercise 1

Parenthesise the following numeric expressions:

1. $2^3 * 4$

2. $2 * 3 + 4 * 5$

3. $2 + 3 * 4^5$

Use GHCi to check your answers.

Exercise 2

The script below contains three syntactic errors. Correct these errors and then check that your script works properly using GHCi.

```
n = let a = 10
      xs = [1,2,3,4,5]
      in a `div` length xs
```

Exercise 3

The library function *last* selects the last element of a non-empty list; for example:

$$\text{last } [1,2,3,4,5] = 5$$

Show that the function *last* could be defined in terms of the other library functions introduced so far.

Exercise 4

The library function *init* removes the last element of a non-empty list; for example:

$$\textit{init} \ [1,2,3,4,5] = [1,2,3,4]$$

Show that the function *init* could be defined in terms of the other library functions introduced so far.