

Lab 2

You are fine to work together with others for this lab. The tasks to complete are numbered below.

- 1) Get the total sum for how many phone numbers are in the `phonebook` from the `mapData.hs` script provided. Use a fold and lambda function instead of the `sum` function.
- 2) Recall we had the `isIn` function last week (with `Data.List` module loaded):

```
let
  isIn :: (Eq a) => [a] -> [a] -> Bool
  sublist `isIn` xs = any (sublist `isPrefixOf`) (tails xs)
```

There is also the function `Map.toList` that will convert the map back into a list.

Use lambda functions with functions we learned last week, and the above to help count how many phone numbers have a key containing “eta”.

- 3) Calculate the percentage of phone numbers from Question 2 out of the total from Question 1.

This lab is out of 5 marks total. There are 2 marks for each of Question 1 and 2, and 1 mark for Question 3. Submit a `lab2.hs` file to Blackboard in the Assignments and Tests section under Lab 2 submission by the end of the class.