

Names: Gianni Monteban and Martijn Vogelaar
Studentnumbers: s1047546 and s1047391

0.1 Exercise 3.3

0.2 Tutorial

return an infinite list of all the elements

```
allElements :: a -> [a]
```

```
allElements x = x: allElements
```

```
step :: (Enum a) => a -> [a]
```

```
step x = [x..]
```

```
fromStep (Num a) => a -> a-> [a]
```

```
fromStep x y = x : fromStep (x+y) (y)
```

```
fromTo :: (Enum a, Ord a) => a -> a -> [a]
```

```
fromTo x y =
```

```
  | x <= y = [x] ++ fromTo (succ x) (y)
```

```
  | otherwise = []
```

```
format :: Int -> [String] -> [[String]]
```

```
format x str = line x str [] []
```

```
line :: Int -> [String] -> [String] -> [[String]] -> [[String]]
```

```
line maxLength [] oldLine result = (result ++ [oldLine])
```

```
line maxLength (w : ws) oldLine result =
```

```
  | length( unWords oldLine) + (length w) + 1 <= maxLength =
```

```
  line maxLength (ws) (oldLine ++ [w]) result
```

```
  | otherwise = line maxLength (ws) ([w]) (result ++ [oldLine])
```

```
([2,3,4] (?->) (>10)) (*2)
```

```
(\f -> and [ (>10) (f x)) | x <- [2,3,4]) (*2)
```

```
and [(>10) (*2) x | x <- [2,3,4]]
```

```
and [False,False,False]
```

```
False && False && False
```

```
False
```

`([[1,2,3],[2,4,7]] (?->) (isSorted)) id`