

Exercise 1 *Map and Filter*

In this exercise, you will redefine the following recursive functions using `map` and `filter`.

```
squareList [] = []  
squareList (x : xs) = x ^ 2 : squareList xs
```

```
evenList [] = []  
evenList (x : xs)  
  | even x = x : evenList xs  
  | otherwise = evenList xs
```

```
squareEven [] = []  
squareEven (x : xs)  
  | even x = (x ^ 2) : squareEven xs  
  | otherwise = squareEven xs
```

1. Rewrite `squareList` in one line using `map`
2. Rewrite `evenList` in one line using `filter`
3. Rewrite `squareEven` in one line using a combination of `map` and `filter`