What do the following evaluate to (type and value)?

ghci> map length ["ab", "aaaaa", "b"]

ghci> map (^3) [1,3,6]

ghci> headA x = (head x) == 'a'
ghci> filter headA ["ab", "aaaaa", "b"]

How would you implement the map function? The filter function?

The mapish function takes a list of functions and a single element x. It then returns a list
of the results of applying each function to \( x \). Implement the \texttt{mapish} function.

What is the type of the function \texttt{foo}? What does the function do?

\[
\texttt{foo } y \ zs = \texttt{map (} \lambda x \to x^y \texttt{) } zs
\]