Foundations of Computer Science

Code the curried function \texttt{exf}, which takes as arguments the function \( f \) and the list \( l \). The result must consist of those elements \( x \) of \( l \) such that \( f(x) \) is also a member of \( l \). The elements of the result must be distinct from each other but may appear in any order. For example, if \( f(x) = x + 1 \) and \( l = [9, 3, 2, 2, 8] \) then the result should be \([2, 8]\) or \([8, 2]\). \[9 \text{ marks}\]

State, with justification, the type of \texttt{exf}. \[1 \text{ mark}\]