

2000 Paper 1 Question 1

Foundations of Computer Science

This question has been translated from Standard ML to OCaml

Code the curried function `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 marks]

State, with justification, the type of `exf`. [1 mark]