letAndEfficiency.md 2024-04-09

Recursion and Efficiency

When using recursion, we must avoid implementations that are less than **efficient**. In other words some recursive functions are called multiple times during an implementation of a function resulting in an exponential increase in cost.

Making recursion efficient

Efficiency will lie in our ability to avoid making multiple (unnecessary) recursive calls.

In ML our let expression allows us to use bindings and return expressions. In other words the let expression returns a value based off one (recursive) funcion call.