

Homework 10

1. occurrences(_, [], 0). *This is not initially a list.* ^{meghan} ^{cloughlin}
occurrences(sub, [subTerm], N) \leftarrow occurrences(sub, Term, M),
N = M + 1.
occurrences(sub, [X | Term], N) \leftarrow Sub \neq X,
occurrences(sub, Term, N).

2. position(Term, Term, []).

position(Sub, Term, Pos) \leftarrow compound(Term),
functor(Term, F, N), position(N, Sub, Term, Pos)

position(N, Sub, Term, [N | Pos]) \leftarrow arg(N, Term, Arg),
position(Sub, Arg, Pos).

position(N, Sub, Term, Pos) \leftarrow N > 1, M = N - 1,
position(M, Sub, Term, Pos).

functor is true if Term has name F and Arity
- find name and arity (x of args)
- builds w/ name and arity

arg is true if the Nth argument of Term is Arg
- find particular argument