

eo(L, [], L).  
eo([], L, L).  
eo([H1|T1], [H2|T2], [H1,H2|T]) :- eo(T1, T2, T).

eo([1,2,3,4,5], [a,b,c], L).  
    L = [1,a|T] → eo([2,3,4,5], [b,c], T)  
        T = [2,b|T2] → eo([3,4,5], [c], T2)  
            T2 = [3,c|T3] → eo([4,5], [], T3)  
                T3 = [4,5]  
                    T2 → [3,c,4,5]  
                        T → [2,b,3,c,4,5]  
                            L → [1,a,2,b,3,c,4,5]  
→ L = [1,a,2,b,3,c,4,5]