

Head		Tail
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[ a | b ]

[ Vegetable | Window ]

Vegetable = a    window = b

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[ 1, 2 ]

[ 1 | [ 2 | [] ] ]

[ a b c d e ]

↓

[ H | T ]

H = a , T = [ b, c, d, e ]

? - Range Query

pairparts ( [ H | T ], H, T ).

? - pairparts ( [ 1 | 2 ], x, y )

x = 1,

T = 2.

## Recursion

factorial (1, 1).

factorial (N, F) :-  $N > 1$ ,  
N1 is N-1, factorial (N1, F1), F is N \* F1.

?- factorial (10, X)  $N1 = N-1$   $(N-1)!$   $N * (N-1)!$

duplicate\_list\_element ([], []).

duplicate\_list\_elements ([H | T], [H, H | T2]) :- duplic. (T, T2)