% insert\_nth(+N, +Element, +List, -Result)

% Inserts Element at the Nth position in the List, producing the Result.

insert\_nth(1, Element, List, [Element|List]). % If N is 1, insert at the start.

insert\_nth(N, Element, [H|T], [H|Result]) :-

N > 1, % If N is greater than 1, keep the head.

N1 is N - 1, % Decrement N by 1.

insert\_nth(N1, Element, T, Result). % Recursively insert at Nth position.