

2 3 4 5 6 7 8 9 10 11 12 13

cur(N, LP) :- lista(2, N, L),  
curvire(L, LP).

lista(K, N, []) :- K > N, !.

lista(K, N, [K|T]) :- SK is K+1,  
lista(SK, N, T).

curvire([], [])

curvire([H|T], [H|L]) :- filtreaza(H, T, M),  
curvire(M, L).

\* filtreaza(\_, [], []) :- !.

filtraza(X, L, M) :- elimaxlea(X, L, [], P, S),  
filtraza(X, S, S.filtrata), append(P, S.filtrata, M)

elimaxlea(\_, [], P, P, []).

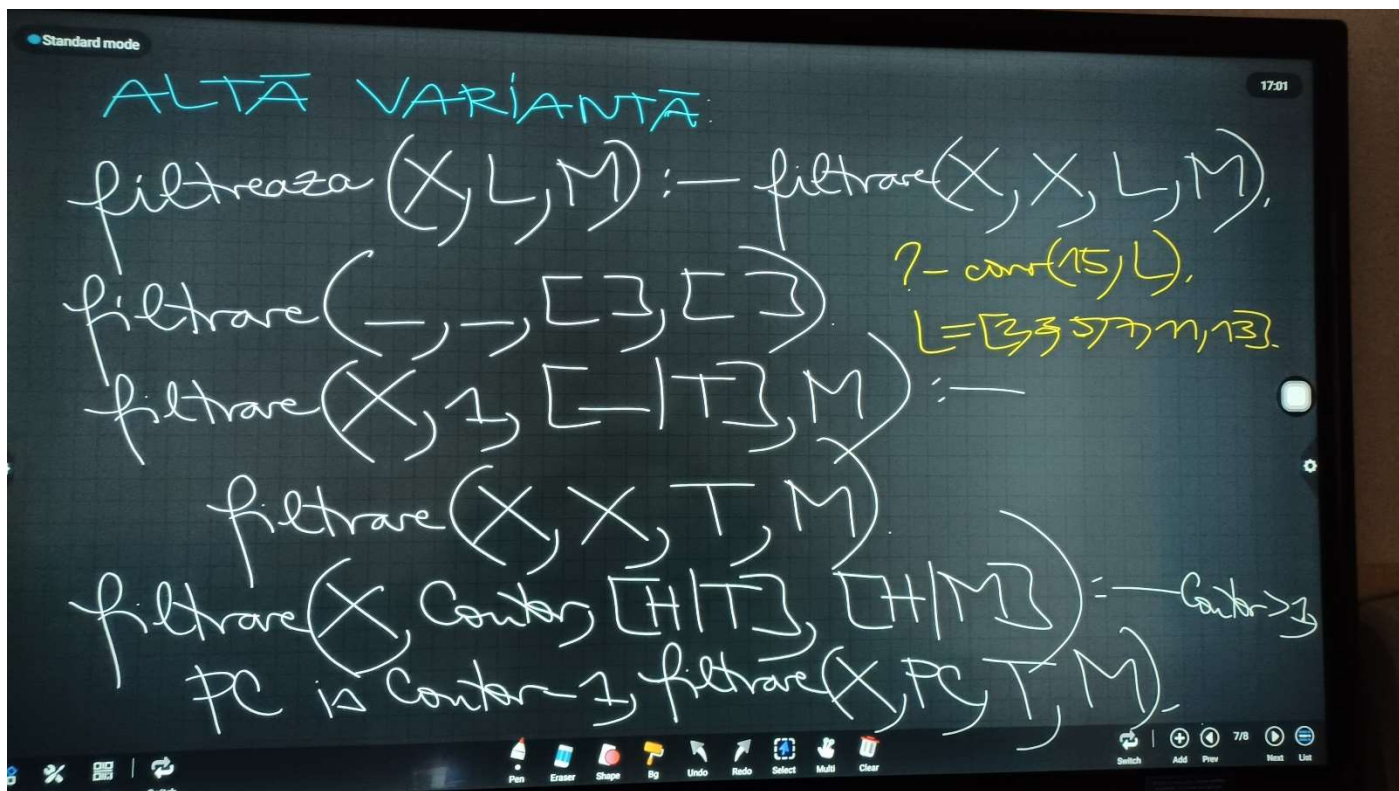
? - cur(13, L)

L = [2, 3, 5, 7, 11, 13]

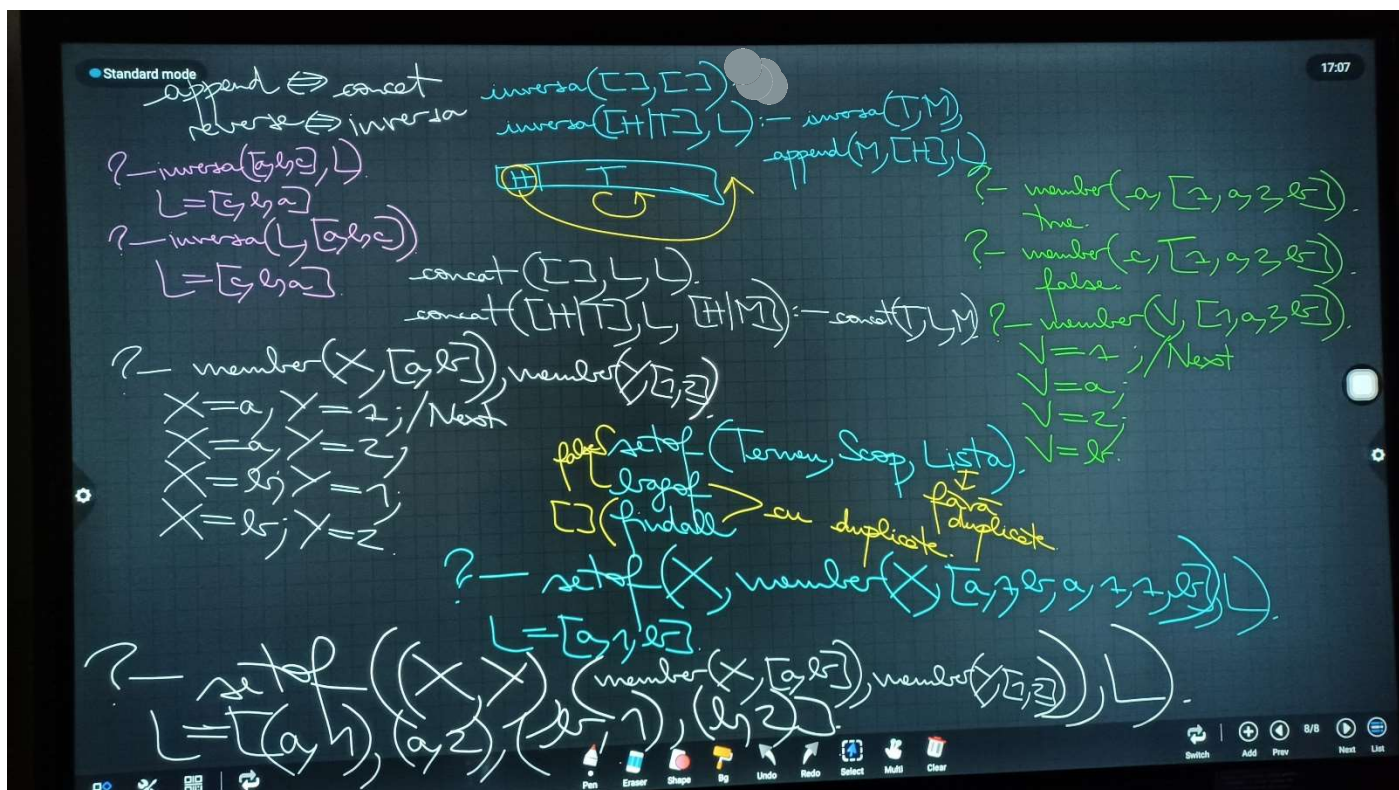
elimaxlea(1, [H|T], P, P, T).

elimaxlea(X, [H|T], Pred, P, S) :- X > H,  
append(Pred, [H], PredH), PX is X - 1,  
elimaxlea(PX, T, PredH, P, S).





Rectific definiția predicatului **inversa**: folosirea lui cut (!) nu elimină ciclarea după afișarea unicei soluții în cazul de interogare **inversa(-CareiListe,+AceastaLista)**, ci împiedică obținerea acestei soluții:





$\text{apartime}(\_, \_):-\text{fail}$

$\text{not}(\text{apartime}(\_, \_)) = \_$

$\text{apartime}(H, [H|\_]):-!$

?- fail.

$\text{apartime}(X, [\_|T]):-\text{apartime}(X, T)$

$\text{member}(\_, \_):-\text{fail}$

$\text{member}(H, [H|\_]) \Leftrightarrow \text{member}(X, [H|\_]) \Leftrightarrow X=H$

$\text{member}(X, [\_|T]):-\text{member}(X, T)$

?-  $\text{memberlistid}(X, [a, 1, v, e, w])$

$\text{memberlistid}(\_, \_):-\text{fail}$

$\text{memberlistid}(X, [H|\_]):-X=H$

$\text{memberlistid}(X, [\_|T]):-\text{memberlistid}(X, T)$

?-  $\text{memberlistid}(X, [a, 1, v, X, e, w, X])$   
true; / Next  
true; / Next  
false



Let  $A, B, C, T$  multisets.  
 $A=B \stackrel{\text{def}}{=} (\forall x)(x \in A \Leftrightarrow x \in B)$

$A \subseteq B \stackrel{\text{def}}{=} (\forall x \in A)(x \in B)$

$\Leftrightarrow (\forall x)(x \in A \Rightarrow x \in B)$

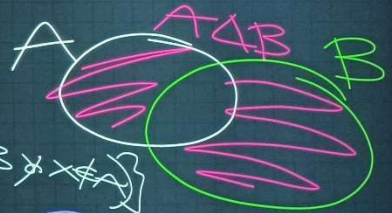
$A \subseteq B$  &  $B \subseteq A \Leftrightarrow [(\forall x)(x \in A \Rightarrow x \in B) \wedge (\forall x)(x \in B \Rightarrow x \in A)]$

$\Leftrightarrow (\forall x)(x \in A \Leftrightarrow x \in B) \Leftrightarrow A=B$

$A \subset B \stackrel{\text{def}}{=} A \subseteq B \wedge A \neq B$

$A \Delta B = \{x | (x \in A \wedge x \notin B) \vee (x \notin A \wedge x \in B)\}$   
 $= \{x | x \in A \text{ xor } x \in B\}$

$A \cup B \stackrel{\text{def}}{=} \{x | x \in A \text{ or } x \in B\}$   
 $A \cap B \stackrel{\text{def}}{=} \{x | x \in A \text{ & } x \in B\}$   
 $A \setminus B \stackrel{\text{def}}{=} \{x | x \in A \text{ & } x \notin B\}$   
 $A \Delta B \stackrel{\text{def}}{=} (A \setminus B) \cup (B \setminus A)$



Given  $A \subseteq T$ , then:

$\overline{A} \stackrel{\text{def}}{=} T \setminus A$





