%revah(L,R)

revah([],R,R).

revah([H|T],S,R):- revah(T,[H|S],R).

revv(L,R):- revah(L,[],R).

same([],R,R).

same([H|T],S,[H|R]):- same(T,S,R).

samme(L,R):- same(L,[],R).

%flatten(L,R)

flt([],(R,R)).

flt([H|T],(S,[H|R])):- \+ is\_list(H), flt(T,(S,R)).

flt([H|T],(S,R)):- is\_list(H), flt(H,(A,R)), flt(T,(S,A)).

flatten(L,R):- flt(L,([],R)).

quicksort([],[]).

quicksort([H|T],L) :- split(H,T,A,B), write(A),write(" "),write(B),nl, quicksort(A,M), quicksort(B,N), append(M,[H|N],L).

split(\_,[],[],[]).

split(X,[H|T],[H|A],B) :- H < X, split(X,T,A,B).

split(X,[H|T],A,[H|B]) :- H >= X, split(X,T,A,B).

qs([],A,A).

qs([H|T],S,R):- split(H,T,A,B), qs(A,S,M),qs(B,[H|M],R).

quick(A,B):-qs(A,[],B).

quicksortd(L,R) :- quicksortdh(L,(R,[])).

quicksortdh([],(R,R)).

quicksortdh([H|T],(R,S)) :- split(H,T,A,B), quicksortdh(A,(R,[H|N])),

quicksortdh(B,(N,S)).

word\_letters(X,Y) :- atom\_chars(X,Y).

liminus([C|L],C,L).

liminus([D|L],C,[D|M]) :- D\==C, liminus(L,C,M).

cover([],\_).

cover([H|T],L) :- liminus(L,H,M), cover(T,M).