

```

:- style_check(-singleton).
stream('C:/Users/Sandu/Desktop/Project KRR/a.txt').
write_to_file(Stream, Message):-
    telling(OldStream),tell(Stream),
    write(Message),
    told,tell(OldStream).

read_from_file(Stream, X):-
    seeing(OldStream),see(Stream),
    read(X),
    read(end_of_file),
    seen,see(OldStream).

wtf(Message):-
    telling(OldStream),tell('C:/Users/Sandu/Desktop/Project KRR/b.txt'),
    write(Message),
    told,tell(OldStream).

rff(X):-
    seeing(OldStream),see('C:/Users/Sandu/Desktop/Project KRR/a.txt'),
    read(X),
    read(end_of_file),
    seen,see(OldStream).

resolve(C1,C2,P,Res) :-
    member(P, C1),
    negate(P,Q),
    member(Q, C2),
    delete(C1,P,D1),
    delete(C2,Q,D2),
    subtract(D1,D2,D),
    merge(D,D2,Res),
    !.

resolve(C1,C2,P,Res) :- member(P, C2),
    negate(P,Q),
    member(Q, C1),
    delete(C1,Q,D1),
    delete(C2,P,D2),
    subtract(D1,D2,D),
    merge(D,D2,Res),
    %dif(Res,[]),
    !.

add_to_formula(Res,X1,X):-
    \+member(Res,X1),
    merge([Res],X1,X).

negate_all([],R,R).
negate_all([H|T],R,R1):-negate(H,P),negate_all(T,[P|R],R1).

get_terms(X,L):-append(X,R),negate_all(R,[],R1),merge(R1,R,R2),sort(R2,L).

search_formula(_,[],_,_,_).
search_formula(P,[C1|T],C1,X,C2):- member(P,C1),search_formula2(n(P),X,C2).
search_formula(P,[H|T],C1,X,C2):- search_formula(P,T,C1,X,C2).

search_formula2(_,[],_):-false.
search_formula2(P,[C1|T],C1):- member(P,C1),!.
search_formula2(P,[H|T],C1):- search_formula2(P,T,C1).

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```
negate(n(A), A) :- !.  
negate(A, n(A)).  
  
rec([[]|_]):-!,wtf('UNSATISFIABLE'),nl,!,false.  
rec(X):-  
    (search_formula(H,X,C1,X,C2),  
    %get_terms(X,L),  
    %member(H,L),  
    member(C1,X),  
    member(C2,X),  
    resolve(C1,C2,H,Res),  
    add_to_formula(Res,X,F),!;wtf('SATISFIABLE'),nl,!,false),  
    rec(F).  
  
solve(X):- rff(X),rec(X).
```