# Lab 3: Resolution and CSP

## Source code:

student(ram).

pass\_exam(ram).

engineer(X):-student(X),pass\_exam(X).

enemy(nono).

weapon(X):-missile(X).

american(colonel).

has(nono,missile(X)).

missile(X).

has(colonel,missile(X)).

sell(colonel,nono,X):-missile(X),has(colonel,X).

criminal(X):-american(X),weapon(Z),enemy(Y),sell(X,Y,Z).

digit(0).

digit(1).

digit(2).

digit(3).

digit(4).

digit(5).

digit(6).

digit(7).

digit(8).

digit(9).

different([]).

different([X|R]):-not(member(X,R)),different(R).

solution(L):-digit(S),S>0,digit(E),digit(N),digit(D),digit(M),M>0,digit(O),digit(R),digit(Y),

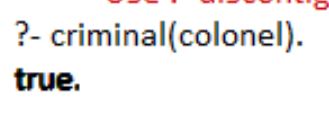
1000\*S+100\*E+10\*N+D+1000\*M+100\*O+10\*R+E=:=10000\*M+1000\*O+100\*N+10\*E+Y,

L=[S,E,N,D,M,O,R,Y],

different(L).

## Output:





## Conclusion:

Hence in this lab we learnt about implementing resolution and CSP in PROLOG.