swipath = 'C:\\Program Files\\swipl\\bin'  
import os  
os.environ['PATH'] = swipath + os.pathsep + os.environ['PATH']  
  
from pyswip import Prolog  
prolog = Prolog()  
prolog.assertz("abuelo(jose,samuel)")  
prolog.assertz("abuelo(jose,joel)")  
prolog.assertz("abuelo(jose,debra)")  
  
#list(prolog.query("abuelo(jose,X)")) == [{'X': 'samuel'}, {'X': 'joel'}, {'X': 'debra'}]  
  
prolog.assertz("nieto(samuel,jose)")  
prolog.assertz("nieto(joel,jose)")  
prolog.assertz("nieto(debra,jose)")  
  
prolog.assertz("primo(samuel,saul)")  
prolog.assertz("primo(samuel,natalia)")  
prolog.assertz("primo(samuel,cesar)")  
#list(prolog.query("abuelo(jose,X)")) == [{'X': 'samuel'}, {'X': 'joel'}, {'X': 'debra'}]  
for persona in prolog.query("abuelo(X,Y)"):  
 print(persona["X"], "es abuelo de: ", persona["Y"])  
  
for persona in prolog.query("nieto(X,Y)"):  
 print(persona["X"], "es nieto de: ", persona["Y"])  
  
for persona in prolog.query("primo(X,Y)"):  
 print(persona["X"], "es primo de: ", persona["Y"])

