<https://github.com/xmonader/prolog-rands/blob/master/crime.pl>

<https://www.codepoc.io/blog/prolog/5104/prolog-problem-of-murder-mystory?utm_source=22>

<http://www.dailyfreecode.com/code/prolog-find-murderer-3035.aspx>

domains

name, sex, occupation, object, vice, substance = symbol

age=integer

predicates

person(name, age, sex, occupation)

had\_affair(name, name)

killed\_with(name, object)

killed(name)

killer(name)

motive(vice)

smeared\_in(name, substance)

owns(name, object)

operates\_identically(object, object)

owns\_probably(name, object)

suspect(name)

/\* \* \* Facts about the murder \* \* \*/

clauses

person(bert, 55, m, carpenter).

person(allan, 25, m, football\_player).

person(allan, 25, m, butcher).

person(john, 25, m, pickpocket).

person(bhalja,55,m,football).

had\_affair(barbara, john).

had\_affair(barbara, bert).

had\_affair(susan, john).

had\_affair(susan,bhalja).

killed\_with(susan, club).

killed(susan).

motive(money).

motive(jealousy).

motive(righteousness).

smeared\_in(bhalja, blood).

smeared\_in(susan, blood).

smeared\_in(allan, mud).

smeared\_in(john, chocolate).

smeared\_in(barbara, chocolate).

smeared\_in(bert,choclate).

owns(bert, wooden\_leg).

owns(john, pistol).

owns(bhalja,club).

/\* \* \* Background knowledge \* \* \*/

operates\_identically(wooden\_leg, club).

operates\_identically(bar, club).

operates\_identically(pair\_of\_scissors, knife).

operates\_identically(football\_boot, club).

owns\_probably(X, football\_boot) :-

person(X, \_, \_, football\_player).

owns\_probably(X, pair\_of\_scissors) :-

person(X, \_, \_, hairdresser).

owns\_probably(X, Object) :-

owns(X, Object).

/\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* Suspect all those who own a weapon with \* \* which Susan could have been killed. \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*/

suspect(X) :-

killed\_with(susan, Weapon) ,

operates\_identically(Object, Weapon) ,

owns\_probably(X, Object).

/\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* Suspect men who have had an affair with Susan. \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*/

suspect(X) :-

motive(jealousy) ,

person(X, \_, m, \_) ,

had\_affair(susan, X).

/\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* Suspect females who have had an \* \* affair with someone that Susan knew. \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*/

suspect(X) :-

motive(jealousy) ,

person(X, \_, f, \_) ,

had\_affair(X, Man) ,

had\_affair(susan, Man).

/\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* Suspect pickpockets whose motive could be money. \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*/

suspect(X) :-

motive(money) , person(X, \_, \_, pickpocket).

killer(Killer) :-

person(Killer, \_, \_, \_) ,

killed(Killed) ,

Killed <> Killer , /\* It is not a suicide \*/

suspect(Killer) ,

smeared\_in(Killer, Temp) ,

smeared\_in(Killed, Temp).