EXPERIMENT:28 Write the prolog program for Medical Diagnosis

PROGRAM:

% Facts: disease(Name, SymptomsList)

disease(flu, [fever, cough, headache, body_pain]).

disease(cold, [cough, sneezing, mild_fever]).

disease(malaria, [fever, chills, sweating, headache]).

disease(chickenpox, [fever, rash, tiredness]).

disease(dengue, [fever, headache, joint_pain, rash]).

% Rule: diagnose based on symptoms

diagnose(Symptoms, Disease) :-

   disease(Disease, DiseaseSymptoms),

   subset(Symptoms, DiseaseSymptoms).

% Helper: check if all Symptoms are in DiseaseSymptoms

subset([], _).

subset([H|T], List) :-

   member(H, List),

   subset(T, List).

OUTPUT:

diagnose([fever, cough, headache], Disease).

Disease = flu

Next   10   100   1,000   Stop

?- diagnose([fever, cough, headache], Disease).