% Knowledge Base

% Symptoms for diseases

has\_symptom(patient, fever).

has\_symptom(patient, cough).

has\_symptom(patient, sore\_throat).

has\_symptom(patient, fatigue).

has\_symptom(patient, headache).

% Disease rules

diagnose(patient, flu) :-

has\_symptom(patient, fever),

has\_symptom(patient, cough),

has\_symptom(patient, sore\_throat),

has\_symptom(patient, fatigue).

diagnose(patient, cold) :-

has\_symptom(patient, cough),

has\_symptom(patient, sore\_throat),

has\_symptom(patient, headache).

diagnose(patient, covid19) :-

has\_symptom(patient, fever),

has\_symptom(patient, cough),

has\_symptom(patient, fatigue),

has\_symptom(patient, headache).

% Treatment suggestions

treatment(flu, 'Rest, drink fluids, and take antiviral medication').

treatment(cold, 'Rest, stay hydrated, and use over-the-counter cold remedies').

treatment(covid19, 'Isolate, monitor symptoms, and consult a doctor').

% Query to get diagnosis and treatment

suggest\_treatment(Patient, Disease, Advice) :-

diagnose(Patient, Disease),

treatment(Disease, Advice).