

1

7.IMPLEMENTATION OF BACKWARD CHAINING

**Name: SANJAY V**

**Roll No:241801247**

**Class: AI&DS “FD”**

knowledge\_base = {

"flu": [["cough", "fever"]],

"fever": [["sore\_throat"]],

}

facts = {"sore\_throat", "cough"} def backward\_chaining(goal):

if goal in facts:

return True

if goal in knowledge\_base:

for conditions in knowledge\_base[goal]:

if all(backward\_chaining(cond) for cond in conditions): return True

return False

# Query: Does the patient have flu? query = "flu"

if backward\_chaining(query):

print(f"The patient is diagnosed with {query}.") else:

print(f"The patient does NOT have {query}.")

