Exp-04 FORWARD CHAINING SRINIVASAN

231701054

**AIM:**

Implementation of forward Chaining

**CODE:**

rules = {

    "raining": "wet",

    "wet": "need\_umbrella"

}

facts = {"raining"}

def forward\_chaining(facts, rules):

    inferred = set()

    while True:

        new\_fact = None

        for condition, result in rules.items():

            if condition in facts and result not in facts:

                new\_fact = result

                break

        if new\_fact:

            print(f"Inferred: {new\_fact}")

            facts.add(new\_fact)

            inferred.add(new\_fact)

        else:

            break

    return inferred

inferred\_facts = forward\_chaining(facts, rules)

print("Final Facts:”, facts)

**RESULT:**

Inferred: wet

Inferred: need\_umbrella

Final Facts: {'need\_umbrella', 'wet', 'raining'}