

```

def forward_chaining(facts, rules, goal):
    inferred = set(facts)
    applied = True

    while applied:
        applied = False
        for rule in rules:
            head = rule[0]
            body = rule[1:]

            if head not in inferred and all(premise in inferred for premise in body):
                inferred.add(head)
                applied = True

    return goal in inferred

# -----
# Define the knowledge base (rules)
# Format: [conclusion, premise1, premise2, ...]
rules = [
    ['c', 'a', 'b'],
    ['d', 'b'],
    ['f', 'c', 'd']
]

# Initial facts
facts = ['a', 'b']

```

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# -----  
# Test goals  
goals = ['f', 'e', 'd']  
  
for goal in goals:  
    if forward_chaining(facts.copy(), rules, goal):  
        print(f"The goal '{goal}' can be achieved.")  
    else:  
        print(f"The goal '{goal}' cannot be achieved.")
```