

main.py



Share

Run

```
1 knowledge_base = {
2     "flu": ["cough", "fever"],
3     "fever": ["sore_throat"],
4 }
5
6 facts = {"sore_throat", "cough"}
7
8 def backward_chaining(goal):
9     if goal in facts:
10         return True
11     if goal in knowledge_base:
12         for conditions in knowledge_base[goal]:
13             if all(backward_chaining(cond) for cond in conditions):
14                 return True
15     return False
16
17 query = "flu"
18 if backward_chaining(query):
19     print(f"The patient is diagnosed with {query}.")
20 else:
21     print(f"The patient does NOT have {query}.")
```

Output

Clear

The patient is diagnosed with flu.

=== Code Execution Successful ===