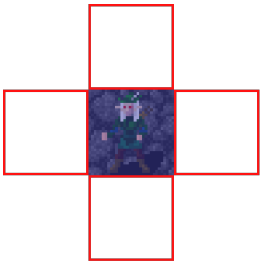
```
We are trying to prove:
IsClear(north(1,1))
-Resolve !IsClear(north(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Wall(north(1,1))
----------Result Pit(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Breezy(c) || !Pit(north(c))
----------Result Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
----------Result Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1))
----------Resolve Pit(north(1,1)) || Wumpus(north(1,1)) and Breezy(c) || !Pit(north(c))
--------------Result Breezy(1,1) || Wumpus(north(1,1))
----------Resolve Pit(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
--------------Result Stinky(1,1) || Pit(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Wall(north(1,1))
--------------Result Breezy(1,1) || Wumpus(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(north(1,1))
--------------Resolve Breezy(1,1) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(north(1,1)) and !Stinky(1,1)
------------------Result Pit(north(1,1))
--------------Resolve Stinky(1,1) || Pit(north(1,1)) and Breezy(c) || !Pit(north(c))
------------------Result Breezy(1,1) || Stinky(1,1)
------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(south(1,1))
-Resolve !IsClear(south(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and !Wall(south(1,1))
----------Result Pit(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Breezy(d) || !Pit(south(d))
----------Result Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
----------Result Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Pit(south(1,1)) || Wumpus(south(1,1)) and Breezy(d) || !Pit(south(d))
--------------Result Breezy(1,1) || Wumpus(south(1,1))
----------Resolve Pit(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
--------------Result Stinky(1,1) || Pit(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and !Wall(south(1,1))
--------------Result Breezy(1,1) || Wumpus(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(south(1,1))
--------------Resolve Breezy(1,1) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(south(1,1)) and !Stinky(1,1)
------------------Result Pit(south(1,1))
--------------Resolve Stinky(1,1) || Pit(south(1,1)) and Breezy(d) || !Pit(south(d))
------------------Result Breezy(1,1) || Stinky(1,1)
------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(east(1,1))
-Resolve !IsClear(east(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
----------Result Pit(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
----------Result Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
----------Result Stinky(1,1) || Pit(east(1,1)) || Wall(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
--------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------Result Stinky(1,1) || Pit(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
--------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(east(1,1))
--------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(east(1,1)) and !Stinky(1,1)
------------------Result Pit(east(1,1))
--------------Resolve Stinky(1,1) || Pit(east(1,1)) and Breezy(b) || !Pit(east(b))
------------------Result Breezy(1,1) || Stinky(1,1)
------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(west(1,1))
-Resolve !IsClear(west(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Wall(west(1,1))
----------Result Pit(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
----------Result Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
----------Result Stinky(1,1) || Pit(west(1,1)) || Wall(west(1,1))
----------Resolve Pit(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
--------------Result Breezy(1,1) || Wumpus(west(1,1))
----------Resolve Pit(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------Result Stinky(1,1) || Pit(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Wall(west(1,1))
--------------Result Breezy(1,1) || Wumpus(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(west(1,1))
--------------Resolve Breezy(1,1) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(west(1,1)) and !Stinky(1,1)
------------------Result Pit(west(1,1))
--------------Resolve Stinky(1,1) || Pit(west(1,1)) and Breezy(e) || !Pit(west(e))
------------------Result Breezy(1,1) || Stinky(1,1)
------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```



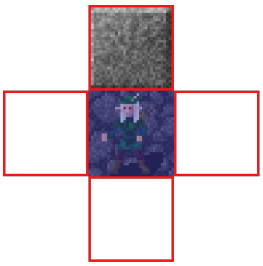
```
We are trying to prove:
IsClear(north(1,1))
-Resolve !IsClear(north(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Wall(north(1,1))
----------Result Pit(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Breezy(c) || !Pit(north(c))
----------Result Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
----------Result Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1))
----------Resolve Pit(north(1,1)) || Wumpus(north(1,1)) and Breezy(c) || !Pit(north(c))
---------------Result Breezy(1,1) || Wumpus(north(1,1))
----------Resolve Pit(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
---------------Result Stinky(1,1) || Pit(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Breezy(1,1)
--------------Result Wall(north(1,1)) || Wumpus(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Wall(north(1,1))
---------------Result Breezy(1,1) || Wumpus(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
---------------Result Stinky(1,1) || Breezy(1,1) || Wall(north(1,1))
---------------Resolve Breezy(1,1) || Wumpus(north(1,1)) and !Breezy(1,1)
-------------------Result Wumpus(north(1,1))
---------------Resolve Breezy(1,1) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
--------------------Result Stinky(1,1) || Breezy(1,1)
---------------Resolve Stinky(1,1) || Pit(north(1,1)) and !Stinky(1,1)
--------------------Result Pit(north(1,1))
---------------Resolve Stinky(1,1) || Pit(north(1,1)) and Breezy(c) || !Pit(north(c))
--------------------Result Breezy(1,1) || Stinky(1,1)
--------------------Resolve Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
------------------------Result Stinky(1,1)
--------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(south(1,1))
-Resolve !IsClear(south(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Breezy(d) || !Pit(south(d))
----------Result Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
----------Result Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and !Breezy(1,1)
--------------Result Wall(south(1,1)) || Wumpus(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
---------------Result Stinky(1,1) || Breezy(1,1) || Wall(south(1,1))
----------Resolve Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1)) and !Stinky(1,1)
---------------Result Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1)) and Breezy(d) || !Pit(south(d))
---------------Result Breezy(1,1) || Stinky(1,1) || Wall(south(1,1))
--------------Resolve Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
--------------------Result Stinky(1,1) || Wall(south(1,1))
---------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(south(1,1)) and !Stinky(1,1)
--------------------Result Breezy(1,1) || Wall(south(1,1))
---------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(south(1,1)) and !Breezy(1,1)
--------------------Result Stinky(1,1) || Wall(south(1,1))
--------------------Resolve Stinky(1,1) || Wall(south(1,1)) and !Stinky(1,1)
---The rule Wall(south(1,1)) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(east(1,1))
-Resolve !IsClear(east(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
----------Result Pit(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
----------Result Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
----------Result Stinky(1,1) || Pit(east(1,1)) || Wall(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
---------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
---------------Result Stinky(1,1) || Pit(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Breezy(1,1)
```

```
---------------Result Wall(east(1,1)) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
---------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
---------------Result Stinky(1,1) || Breezy(1,1) || Wall(east(1,1))
---------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and !Breezy(1,1)
--------------------Result Wumpus(east(1,1))
---------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------------Result Stinky(1,1) || Breezy(1,1)
---------------Resolve Stinky(1,1) || Pit(east(1,1)) and !Stinky(1,1)
--------------------Result Pit(east(1,1))
---------------Resolve Stinky(1,1) || Pit(east(1,1)) and Breezy(b) || !Pit(east(b))
--------------------Result Breezy(1,1) || Stinky(1,1)
--------------------Resolve Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
-------------------------Result Stinky(1,1)
--------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
----The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(west(1,1))
-Resolve !IsClear(west(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Wall(west(1,1))
----------Result Pit(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
---------Result Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
----------Result Stinky(1,1) || Pit(west(1,1)) || Wall(west(1,1))
----------Resolve Pit(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
---------------Result Breezy(1,1) || Wumpus(west(1,1))
----------Resolve Pit(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------Result Stinky(1,1) || Pit(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Wall(west(1,1))
---------------Result Breezy(1,1) || Wumpus(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Breezy(1,1)
---------------Result Wall(west(1,1)) || Wumpus(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
---------------Result Stinky(1,1) || Breezy(1,1) || Wall(west(1,1))
--------------Resolve Breezy(1,1) || Wumpus(west(1,1)) and !Breezy(1,1)
--------------------Result Wumpus(west(1,1))
---------------Resolve Breezy(1,1) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------------Result Stinky(1,1) || Breezy(1,1)
---------------Resolve Stinky(1,1) || Pit(west(1,1)) and !Stinky(1,1)
--------------------Result Pit(west(1,1))
---------------Resolve Stinky(1,1) || Pit(west(1,1)) and Breezy(e) || !Pit(west(e))
--------------------Result Breezy(1,1) || Stinky(1,1)
--------------------Resolve Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
-------------------------Result Stinky(1,1)
--------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
----The rule Breezy(1,1) is a tautology.
The result is:  0
```



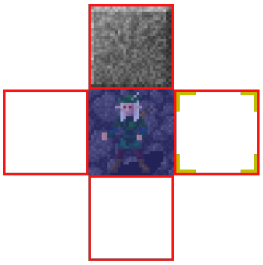
```
We are trying to prove:
IsClear(north(1,1))
-Resolve !IsClear(north(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Wall(north(1,1))
----------Result Pit(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Breezy(c) || !Pit(north(c))
----------Result Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
----------Result Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1))
----------Resolve Pit(north(1,1)) || Wumpus(north(1,1)) and Breezy(c) || !Pit(north(c))
---------------Result Breezy(1,1) || Wumpus(north(1,1))
----------Resolve Pit(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
---------------Result Stinky(1,1) || Pit(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Breezy(1,1)
---------------Result Wall(north(1,1)) || Wumpus(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Wall(north(1,1))
---------------Result Breezy(1,1) || Wumpus(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
---------------Result Stinky(1,1) || Breezy(1,1) || Wall(north(1,1))
---------------Resolve Breezy(1,1) || Wumpus(north(1,1)) and !Breezy(1,1)
```

```
--------------------Result Wumpus(north(1,1))
--------------Resolve Breezy(1,1) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
--------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(north(1,1)) and !Stinky(1,1)
--------------------Result Pit(north(1,1))
--------------Resolve Stinky(1,1) || Pit(north(1,1)) and Breezy(c) || !Pit(north(c))
--------------------Result Breezy(1,1) || Stinky(1,1)
--------------------Resolve Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
------------------------Result Stinky(1,1)
--------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(south(1,1))
-Resolve !IsClear(south(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Breezy(d) || !Pit(south(d))
----------Result Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
----------Result Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and !Breezy(1,1)
--------------Result Wall(south(1,1)) || Wumpus(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(south(1,1))
----------Resolve Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1)) and !Stinky(1,1)
--------------Result Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1)) and Breezy(d) || !Pit(south(d))
--------------Result Breezy(1,1) || Stinky(1,1) || Wall(south(1,1))
--------------Resolve Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
--------------------Result Stinky(1,1) || Wall(south(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(south(1,1)) and !Stinky(1,1)
--------------------Result Breezy(1,1) || Wall(south(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(south(1,1)) and !Breezy(1,1)
--------------------Result Stinky(1,1) || Wall(south(1,1))
--------------------Resolve Stinky(1,1) || Wall(south(1,1)) and !Stinky(1,1)
---The rule Wall(south(1,1)) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(east(1,1))
-Resolve !IsClear(east(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
----------Result Pit(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
----------Result Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
----------Result Stinky(1,1) || Pit(east(1,1)) || Wall(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
--------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------Result Stinky(1,1) || Pit(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Breezy(1,1)
--------------Result Wall(east(1,1)) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
--------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(east(1,1))
--------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and !Breezy(1,1)
--------------------Result Wumpus(east(1,1))
--------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(east(1,1)) and !Stinky(1,1)
--------------------Result Pit(east(1,1))
--------------Resolve Stinky(1,1) || Pit(east(1,1)) and Breezy(b) || !Pit(east(b))
--------------------Result Breezy(1,1) || Stinky(1,1)
--------------------Resolve Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
------------------------Result Stinky(1,1)
--------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(west(1,1))
-Resolve !IsClear(west(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Wall(west(1,1))
----------Result Pit(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
----------Result Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
----------Result Stinky(1,1) || Pit(west(1,1)) || Wall(west(1,1))
----------Resolve Pit(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
--------------Result Breezy(1,1) || Wumpus(west(1,1))
----------Resolve Pit(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------Result Stinky(1,1) || Pit(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Wall(west(1,1))
--------------Result Breezy(1,1) || Wumpus(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Breezy(1,1)
--------------Result Wall(west(1,1)) || Wumpus(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(west(1,1))
--------------Resolve Breezy(1,1) || Wumpus(west(1,1)) and !Breezy(1,1)
--------------------Result Wumpus(west(1,1))
--------------Resolve Breezy(1,1) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(west(1,1)) and !Stinky(1,1)
--------------------Result Pit(west(1,1))
--------------Resolve Stinky(1,1) || Pit(west(1,1)) and Breezy(e) || !Pit(west(e))
--------------------Result Breezy(1,1) || Stinky(1,1)
--------------------Resolve Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
------------------------Result Stinky(1,1)
--------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```



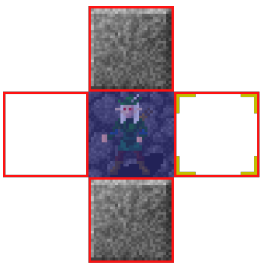
```
We are trying to prove:
IsClear(north(1,1))
-Resolve !IsClear(north(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Breezy(c) || !Pit(north(c))
----------Result Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
----------Result Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Breezy(1,1)
--------------Result Wall(north(1,1)) || Wumpus(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(north(1,1))
----------Resolve Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1)) and !Stinky(1,1)
--------------Result Pit(north(1,1)) || Wall(north(1,1))
----------Resolve Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1)) and Breezy(c) || !Pit(north(c))
--------------Result Breezy(1,1) || Stinky(1,1) || Wall(north(1,1))
--------------Resolve Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
------------------Result Stinky(1,1) || Wall(north(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(north(1,1)) and !Stinky(1,1)
------------------Result Breezy(1,1) || Wall(north(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(north(1,1)) and !Breezy(1,1)
------------------Result Stinky(1,1) || Wall(north(1,1))
------------------Resolve Stinky(1,1) || Wall(north(1,1)) and !Stinky(1,1)
---The rule Wall(north(1,1)) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(south(1,1))
-Resolve !IsClear(south(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Breezy(d) || !Pit(south(d))
----------Result Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
----------Result Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and !Breezy(1,1)
--------------Result Wall(south(1,1)) || Wumpus(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(south(1,1))
----------Resolve Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1)) and !Stinky(1,1)
--------------Result Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1)) and Breezy(d) || !Pit(south(d))
--------------Result Breezy(1,1) || Stinky(1,1) || Wall(south(1,1))
--------------Resolve Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
------------------Result Stinky(1,1) || Wall(south(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(south(1,1)) and !Stinky(1,1)
------------------Result Breezy(1,1) || Wall(south(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(south(1,1)) and !Breezy(1,1)
------------------Result Stinky(1,1) || Wall(south(1,1))
------------------Resolve Stinky(1,1) || Wall(south(1,1)) and !Stinky(1,1)
---The rule Wall(south(1,1)) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(east(1,1))
-Resolve !IsClear(east(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
----------Result Pit(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
----------Result Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
----------Result Stinky(1,1) || Pit(east(1,1)) || Wall(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
--------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------Result Stinky(1,1) || Pit(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Breezy(1,1)
--------------Result Wall(east(1,1)) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
--------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(east(1,1))
--------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and !Breezy(1,1)
------------------Result Wumpus(east(1,1))
--------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
```

```
--------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(east(1,1)) and !Stinky(1,1)
--------------------Result Pit(east(1,1))
--------------Resolve Stinky(1,1) || Pit(east(1,1)) and Breezy(b) || !Pit(east(b))
--------------------Result Breezy(1,1) || Stinky(1,1)
--------------------Resolve Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
------------------------Result Stinky(1,1)
--------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(west(1,1))
-Resolve !IsClear(west(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Wall(west(1,1))
----------Result Pit(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
----------Result Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
----------Result Stinky(1,1) || Pit(west(1,1)) || Wall(west(1,1))
----------Resolve Pit(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
--------------Result Breezy(1,1) || Wumpus(west(1,1))
----------Resolve Pit(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------Result Stinky(1,1) || Pit(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Wall(west(1,1))
--------------Result Breezy(1,1) || Wumpus(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Breezy(1,1)
--------------Result Wall(west(1,1)) || Wumpus(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(west(1,1))
--------------Resolve Breezy(1,1) || Wumpus(west(1,1)) and !Breezy(1,1)
------------------Result Wumpus(west(1,1))
--------------Resolve Breezy(1,1) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(west(1,1)) and !Stinky(1,1)
--------------------Result Pit(west(1,1))
--------------Resolve Stinky(1,1) || Pit(west(1,1)) and Breezy(e) || !Pit(west(e))
--------------------Result Breezy(1,1) || Stinky(1,1)
------------------Resolve Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
------------------------Result Stinky(1,1)
--------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```



```
We are trying to prove:
IsClear(north(1,1))
-Resolve !IsClear(north(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Breezy(c) || !Pit(north(c))
----------Result Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1))
-----Resolve Pit(north(1,1)) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
----------Result Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and !Breezy(1,1)
--------------Result Wall(north(1,1)) || Wumpus(north(1,1))
----------Resolve Breezy(1,1) || Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(north(1,1))
----------Resolve Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1)) and !Stinky(1,1)
--------------Result Pit(north(1,1)) || Wall(north(1,1))
----------Resolve Stinky(1,1) || Pit(north(1,1)) || Wall(north(1,1)) and Breezy(c) || !Pit(north(c))
--------------Result Breezy(1,1) || Stinky(1,1) || Wall(north(1,1))
--------------Resolve Wall(north(1,1)) || Wumpus(north(1,1)) and Stinky(g) || !Wumpus(north(g))
------------------Result Stinky(1,1) || Wall(north(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(north(1,1)) and !Stinky(1,1)
------------------Result Breezy(1,1) || Wall(north(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(north(1,1)) and !Breezy(1,1)
------------------Result Stinky(1,1) || Wall(north(1,1))
------------------Resolve Stinky(1,1) || Wall(north(1,1)) and !Stinky(1,1)
---The rule Wall(north(1,1)) is a tautology.
The result is:  0
```

```
We are trying to prove:
```

```
IsClear(south(1,1))
-Resolve !IsClear(south(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Breezy(d) || !Pit(south(d))
----------Result Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1))
-----Resolve Pit(south(1,1)) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
----------Result Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and !Breezy(1,1)
--------------Result Wall(south(1,1)) || Wumpus(south(1,1))
----------Resolve Breezy(1,1) || Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(south(1,1))
----------Resolve Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1)) and !Stinky(1,1)
--------------Result Pit(south(1,1)) || Wall(south(1,1))
----------Resolve Stinky(1,1) || Pit(south(1,1)) || Wall(south(1,1)) and Breezy(d) || !Pit(south(d))
--------------Result Breezy(1,1) || Stinky(1,1) || Wall(south(1,1))
--------------Resolve Wall(south(1,1)) || Wumpus(south(1,1)) and Stinky(h) || !Wumpus(south(h))
--------------------Result Stinky(1,1) || Wall(south(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(south(1,1)) and !Stinky(1,1)
--------------------Result Breezy(1,1) || Wall(south(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(south(1,1)) and !Breezy(1,1)
--------------------Result Stinky(1,1) || Wall(south(1,1))
--------------------Resolve Stinky(1,1) || Wall(south(1,1)) and !Stinky(1,1)
---The rule Wall(south(1,1)) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(east(1,1))
-Resolve !IsClear(east(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
----------Result Pit(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
----------Result Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1))
-----Resolve Pit(east(1,1)) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
----------Result Stinky(1,1) || Pit(east(1,1)) || Wall(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Breezy(b) || !Pit(east(b))
--------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Pit(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------Result Stinky(1,1) || Pit(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Breezy(1,1)
--------------Result Wall(east(1,1)) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and !Wall(east(1,1))
--------------Result Breezy(1,1) || Wumpus(east(1,1))
----------Resolve Breezy(1,1) || Wall(east(1,1)) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(east(1,1))
--------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and !Breezy(1,1)
------------------Result Wumpus(east(1,1))
--------------Resolve Breezy(1,1) || Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
------------------Result Stinky(1,1) || Breezy(1,1)
--------------Resolve Stinky(1,1) || Pit(east(1,1)) and !Stinky(1,1)
------------------Result Pit(east(1,1))
--------------Resolve Stinky(1,1) || Pit(east(1,1)) and Breezy(b) || !Pit(east(b))
------------------Result Breezy(1,1) || Stinky(1,1)
------------------Resolve Wumpus(east(1,1)) and Stinky(f) || !Wumpus(east(f))
------------------------Result Stinky(1,1)
------------------Resolve Stinky(1,1) || Breezy(1,1) and !Stinky(1,1)
---The rule Breezy(1,1) is a tautology.
The result is:  0
```

```
We are trying to prove:
IsClear(west(1,1))
-Resolve !IsClear(west(1,1)) and IsClear(j) || Pit(j) || Wall(j) || Wumpus(j)
-----Result Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Breezy(e) || !Pit(west(e))
----------Result Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1))
-----Resolve Pit(west(1,1)) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
----------Result Stinky(1,1) || Pit(west(1,1)) || Wall(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and !Breezy(1,1)
--------------Result Wall(west(1,1)) || Wumpus(west(1,1))
----------Resolve Breezy(1,1) || Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
--------------Result Stinky(1,1) || Breezy(1,1) || Wall(west(1,1))
----------Resolve Stinky(1,1) || Pit(west(1,1)) || Wall(west(1,1)) and !Stinky(1,1)
--------------Result Pit(west(1,1)) || Wall(west(1,1))
----------Resolve Stinky(1,1) || Pit(west(1,1)) || Wall(west(1,1)) and Breezy(e) || !Pit(west(e))
--------------Result Breezy(1,1) || Stinky(1,1) || Wall(west(1,1))
--------------Resolve Wall(west(1,1)) || Wumpus(west(1,1)) and Stinky(i) || !Wumpus(west(i))
------------------Result Stinky(1,1) || Wall(west(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(west(1,1)) and !Stinky(1,1)
------------------Result Breezy(1,1) || Wall(west(1,1))
--------------Resolve Stinky(1,1) || Breezy(1,1) || Wall(west(1,1)) and !Breezy(1,1)
------------------Result Stinky(1,1) || Wall(west(1,1))
------------------Resolve Stinky(1,1) || Wall(west(1,1)) and !Stinky(1,1)
---The rule Wall(west(1,1)) is a tautology.
The result is:  0
```