## Question 1

## Query to Run - find\_solution(Father, Son).

Output -

Father = smith,

Son = baker

Father = smith,

**Son** = carpenter

Father = smith,

**Son** = tailor

Father = baker,

**Son** = smith

Father = baker,

**Son** = carpenter

Father = baker,

**Son** = tailor

**Father** = carpenter,

**Son** = smith

**Father** = carpenter,

Son = baker

**Father** = carpenter,

Son = tailor

**Father** = tailor,

**Son** = smith

**Father** = tailor,

Son = baker

**Father** = tailor,

**Son** = carpenter

## Question 2

Query - solve(Solution).

## Output -

**Solution** = [state(0,0,right,3,3), state(1,1,left,2,2), state(0,1,right,3,2), state(0,3,left,3,0), state(0,2,right,3,1), state(2,2,left,1,1), state(1,1,right,2,2), state(3,1,left,0,2), state(3,0,right,0,3), state(3,2,left,0,1), state(3,1,right,0,2), state(3,3,left,0,0)]