Demonstrate recursion in Prolog using Tower of Hanoi problem

Output :

```
% c:/Users/Prajwal/Desktop/AI Lab/Experiment - 8/lab.pl
?-  move(3,source,target,aux).
Move top disk from source to target
Move top disk from source to aux
Move top disk from target to aux
Move top disk from source to target
Move top disk from aux to source
Move top disk from aux to target
Move top disk from source to target
true .

?- trace.
true.

[trace]  ?-  move(3,source,target,aux).
    Call: (12) move(3, source, target, aux) ? creep
    Call: (13) 3>1 ? creep
    Exit: (13) 3>1 ? creep
    Call: (13) _27438 is 3+ -1 ? creep
    Exit: (13) 2 is 3+ -1 ? creep
    Call: (13) move(2, source, aux, target) ? creep
    Call: (14) 2>1 ? creep
    Exit: (14) 2>1 ? creep
    Call: (14) _31504 is 2+ -1 ? creep
    Exit: (14) 1 is 2+ -1 ? creep
    Call: (14) move(1, source, target, aux) ? creep
    Call: (15) write('Move top disk from ') ? creep
Move top disk from
    Exit: (15) write('Move top disk from ') ? creep
    Call: (15) write(source) ? creep
source
    Exit: (15) write(source) ? creep
    Call: (15) write(' to ') ? creep
 to
    Exit: (15) write(' to ') ? creep
    Call: (15) write(target) ? creep
target
    Exit: (15) write(target) ? creep
    Call: (15) nl ? creep

    Exit: (15) nl ? creep
    Exit: (14) move(1, source, target, aux) ? creep
    Call: (14) move(1, source, aux, _42884) ? creep
    Call: (15) write('Move top disk from ') ? creep
Move top disk from
    Exit: (15) write('Move top disk from ') ? creep
    Call: (15) write(source) ? creep
source
    Exit: (15) write(source) ? creep
    Call: (15) write(' to ') ? creep
 to
    Exit: (15) write(' to ') ? creep
    Call: (15) write(aux) ? creep
aux
    Exit: (15) write(aux) ? creep
    Call: (15) nl ? creep

    Exit: (15) nl ? creep

    Exit: (14) move(1, source, aux, _51746) ? creep
    Call: (14) move(1, target, aux, source) ? creep
    Call: (15) write('Move top disk from ') ? creep
 Move top disk from
    Exit: (15) write('Move top disk from ') ? creep
    Call: (15) write(target) ? creep
 target
    Exit: (15) write(target) ? creep
    Call: (15) write(' to ') ? creep
  to
    Exit: (15) write(' to ')
  ? creep
    Call: (15) write(aux)
  ? creep
 aux
    Exit: (15) write(aux) ? creep
    Call: (15) nl ? creep

    Exit: (15) nl ? creep
    Exit: (14) move(1, target, aux, source) ? creep
    Exit: (13) move(2, source, aux, target) ? creep
    Call: (13) move(1, source, target, _63062) ? creep
    Call: (14) write('Move top disk from ') ? creep
 Move top disk from
    Exit: (14) write('Move top disk from ') ? creep
    Call: (14) write(source) ? creep
 source
    Exit: (14) write(source) ? creep
    Call: (14) write(' to ') ? creep
  to
    Exit: (14) write(' to ') ? creep
    Call: (14) write(target) ? creep
 target
    Exit: (14) write(target) ? creep
    Call: (14) nl ? creep

    Exit: (14) nl ? creep
    Exit: (13) move(1, source, target, _7892) ? creep
    Call: (13) move(2, aux, target, source) ? creep
    Call: (14) 2>1 ? creep
    Exit: (14) 2>1 ? creep
    Call: (14) _11076 is 2+ -1 ? creep
    Exit: (14) 1 is 2+ -1 ? creep
    Call: (14) move(1, aux, source, target) ? creep
    Call: (15) write('Move top disk from ') ? creep
```

```
Move top disk from
    Exit: (15) write('Move top disk from ') ? creep
    Call: (15) write(aux) ? creep
aux
    Exit: (15) write(aux) ? creep
    Call: (15) write(' to ') ? creep
 to
    Exit: (15) write(' to ') ? creep
    Call: (15) write(source) ? creep
source
    Exit: (15) write(source) ? creep
    Call: (15) nl ? creep

    Exit: (15) nl ? creep
    Exit: (14) move(1, aux, source, target) ? creep
    Call: (14) move(1, aux, target, _22456) ? creep
    Call: (15) write('Move top disk from ') ? creep
Move top disk from
    Exit: (15) write('Move top disk from ') ? creep
    Call: (15) write(aux) ? creep
aux
    Exit: (15) write(aux) ? creep
    Call: (15) write(' to ') ? creep
 to
    Exit: (15) write(' to ') ? creep
    Call: (15) write(target) ? creep
target
    Exit: (15) write(target) ? creep
    Call: (15) nl ? creep

    Exit: (15) nl
 ? creep
    Exit: (14) move(1, aux, target, _31318) ? creep
    Call: (14) move(1, source, target, aux) ? creep
    Call: (15) write('Move top disk from ') ? creep
Move top disk from
    Exit: (15) write('Move top disk from ') ? creep
    Call: (15) write(source) ? creep
source
    Exit: (15) write(source) ? creep
    Call: (15) write(' to ') ? creep
 to
    Exit: (15) write(' to ')
 ? creep
    Call: (15) write(target) ? creep
target
    Exit: (15) write(target) ? creep
    Call: (15) nl ? creep

    Exit: (15) nl ? creep
    Exit: (14) move(1, source, target, aux) ? creep
    Exit: (13) move(2, aux, target, source) ? creep
    Exit: (12) move(3, source, target, aux) ? creep
true .

[trace]  ?- notrace.
true.

[debug]  ?- nodebug.
true.

?-  move(5,source,target,aux).
Move top disk from source to target
Move top disk from source to aux
Move top disk from target to aux
Move top disk from source to target
Move top disk from aux to source
Move top disk from aux to target
Move top disk from source to target
Move top disk from source to aux
Move top disk from target to aux
Move top disk from target to source
Move top disk from aux to source
Move top disk from target to aux
Move top disk from source to target
Move top disk from source to aux
Move top disk from target to aux
Move top disk from source to target
Move top disk from aux to source
Move top disk from aux to target
Move top disk from source to target
Move top disk from aux to source
Move top disk from target to aux
Move top disk from target to source
Move top disk from aux to source
Move top disk from aux to target
Move top disk from source to target
Move top disk from source to aux
Move top disk from target to aux
Move top disk from source to target
Move top disk from aux to source
Move top disk from aux to target
Move top disk from source to target
true
```