

## Monkey Banana problem using Prolog

### Output :

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% c:/Users/Prajwal/Desktop/AI Lab/Experiment - 6/lab.pl compiled 0.00 sec, 10 clauses
?- Usage: can_reach(X,Y).
Usage = user.
X = monkey.
Y = bananas.

?- trace.
true.

[trace] ?- can_reach(X,Y).
Call: (12) can_reach(_25482, _25484) ? creep
Call: (13) dexterous(_25482) ? creep
Exit: (13) dexterous(monkey) ? creep
Call: (13) is_close(monkey, _25484) ? creep
Call: (14) can_climb(monkey, _29234) ? creep
Exit: (14) can_climb(monkey, chair) ? creep
Call: (14) under(chair, _25484) ? creep
Call: (15) in_room(_31666) ? creep
Exit: (15) in_room(bananas) ? creep
Call: (15) in_room(chair) ? creep
Exit: (15) in_room(chair) ? creep
Call: (15) in_room(_25484) ? creep
Exit: (15) in_room(bananas) ? creep
Call: (15) can_move(bananas, chair, bananas) ? creep
Fail: (15) can_move(bananas, chair, bananas) ? creep
Redo: (15) in_room(_25484) ? creep
Exit: (15) in_room(chair) ? creep
Call: (15) can_move(bananas, chair, chair) ? creep
Fail: (15) can_move(bananas, chair, chair) ? creep
Redo: (15) in_room(_25484) ? creep
Exit: (15) in_room(monkey) ? creep
Call: (15) can_move(bananas, chair, monkey) ? creep
Fail: (15) can_move(bananas, chair, monkey) ? creep
Redo: (15) in_room(_31666) ? creep
Exit: (15) in_room(chair) ? creep
Call: (15) in_room(chair) ? creep
Exit: (15) in_room(chair) ? creep
Call: (15) in_room(_25484) ? creep
Exit: (15) in_room(bananas) ? creep
Call: (15) can_move(chair, chair, bananas) ? creep
Fail: (15) can_move(chair, chair, bananas) ? creep
Redo: (15) in_room(_25484) ? creep
Exit: (15) in_room(chair) ? creep
Call: (15) can_move(chair, chair, chair) ? creep
Fail: (15) can_move(chair, chair, chair) ? creep
Redo: (15) in_room(_25484) ? creep
Exit: (15) in_room(monkey) ? creep
Call: (15) can_move(chair, chair, monkey) ? creep
Fail: (15) can_move(chair, chair, monkey) ? creep
Redo: (15) in_room(_31666) ? creep
Exit: (15) in_room(monkey) ? creep
Call: (15) in_room(chair) ? creep
Exit: (15) in_room(chair) ? creep
Call: (15) in_room(_25484) ? creep
Exit: (15) in_room(bananas) ? creep
Call: (15) can_move(monkey, chair, bananas) ? creep
Exit: (15) can_move(monkey, chair, bananas) ? creep
Exit: (14) under(chair, bananas) ? creep
Call: (14) tall(chair) ? creep
Exit: (14) tall(chair) ? creep
Exit: (13) is_close(monkey, bananas) ? creep
Exit: (12) can_reach(monkey, bananas) ? creep
X = monkey.
Y = bananas ;
(15) in_room(_60) ? creep
Exit: (15) in_room(chair) ? creep
Call: (15) can_move(monkey, chair, chair) ? creep
Fail: (15) can_move(monkey, chair, chair) ? creep
Redo: (15) in_room(_60) ? creep
Exit: (15) in_room(monkey) ? creep
Call: (15) can_move(monkey, chair, monkey) ? creep
Fail: (15) can_move(monkey, chair, monkey) ? creep
Fail: (14) under(chair, _60) ? creep
Fail: (13) is_close(monkey, _60) ? creep
(12) can_reach(_58, _60) ? creep
false.

[trace] ?- notrace.
true.

[debug] ?- nodebug.
true.

?-
```