


## Experiment No.: 7

### Solve water jug problem using depth first search.

#### Output:

 SWI-Prolog (AMD64, Multi-threaded, version 9.2.6)

File Edit Settings Run Debug Help

Welcome to SWI-Prolog (threaded, 64 bits, version 9.2.6)

SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.

Please run `?- license.` for legal details.

For online help and background, visit <https://www.swi-prolog.org>

For built-in help, use `?- help(Topic).` or `?- apropos(Word).`

`% c:/Users/nayan/Documents/Btech/3-4 year/7 sem/AI/Lab/Practicals/practical-7/practical-7.pl compiled 0.02 sec, 23 clauses`

`?-`

`| test_dfs(jugs, Moves).`

`Moves = [fill(1), transfer(1, 2), empty(1), transfer(2, 1), fill(2), transfer(2, 1), empty(1), transfer(2, 1), fill(...)|...]` ,

`?- test_dfs(jugs, Moves).`

`Moves = [fill(1), transfer(1, 2), empty(1), transfer(2, 1), fill(2), transfer(2, 1), empty(1), transfer(2, 1), fill(...)|...]`