# Prolog AI Assignment

Implement depth first search with iterative deepening (IDDFS) and test it on the 8-puzzle. The solve/3 predicate we discussed extensively in class is essentially depth first search (of state space)

This code should work for all sorts of puzzles such as fwgc, missionaries and cannibals, water jugs.

Submit to Webcourses

- Prolog code
- PDF report

Report should include

- Discussion of relative merits of search strategies
- Explanation of your main Prolog predicates for ID_DFS
- Screen capture of program outputs for DFS on its own as well as ID_DFS

PS: It's a pity we didn't get a chance to look into Heuristic approaches which would allow Best First Search. These are often very efficient, much better than the other approaches. Ask for it next year if you take AI. There are a whole pile of more sophisticated approaches to state space search, but outside the scope of Introductory AI.

# Alternative Assignment

Write an essay, at least 10 pages, on convolutional neural networks, including their history, applications and (optional) how one might implement one or describe a library that does. Cut and paste from the internet is not acceptable. References to sources you used must be included.