## Search Agents

Paste the file Romania.py inside the folder of AIMA python

Open it and try to understand what is happening

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Look this 2 lines of code, you can see the specification inside the file search.py

```
#Creation of the Problem
romania_problem = GraphProblem('Arad', 'Bucharest', romania_map)
#Execution of the search algorithn
solution = breadth_first_tree_search(romania_problem);
```

Try to add (execute) another algorithm of search, i.e. depth\_first\_graph\_search

## Search Agents

What happens if you try to print the solution? Or the type of the variable?

```
print(solution);
print(type(solution));
```

Read the description of the Class returned in the print-type function, It is located inside search.py. Try to discover a way to print all the path in the solution. **Hint:** That path is in the parent's nodes

## Try to execute a solution with the following algorithms (All in search.py)

- Breadth first tree search
- Depth first graph search
  - Depth limited search
  - Uniform cost search
- Iterative deepening search
  - Greedy best-first search
    - · A\* search

Try to print the path and the cost defined by the solution of each one.