**AIMA search Problem class**

- **actions(state)**: Returns iterable of legal actions that can be applied to state.
- **goal_test(state)**: Returns True iff state is a goal.
- **h(node)**: Returns non-negative number estimating the distance from node.state to a goal.
- **path_cost(c,s1,a,s2)**: Returns cost of path from start to state s2, if the cost to get to state s1 is c and we applied action a to s1 producing state s2.
- **results(state,action)**: Returns new state obtained by applying an action in state.

Initialize a problem, specifying required & optional arguments.

All methods also take self as an initial arg.