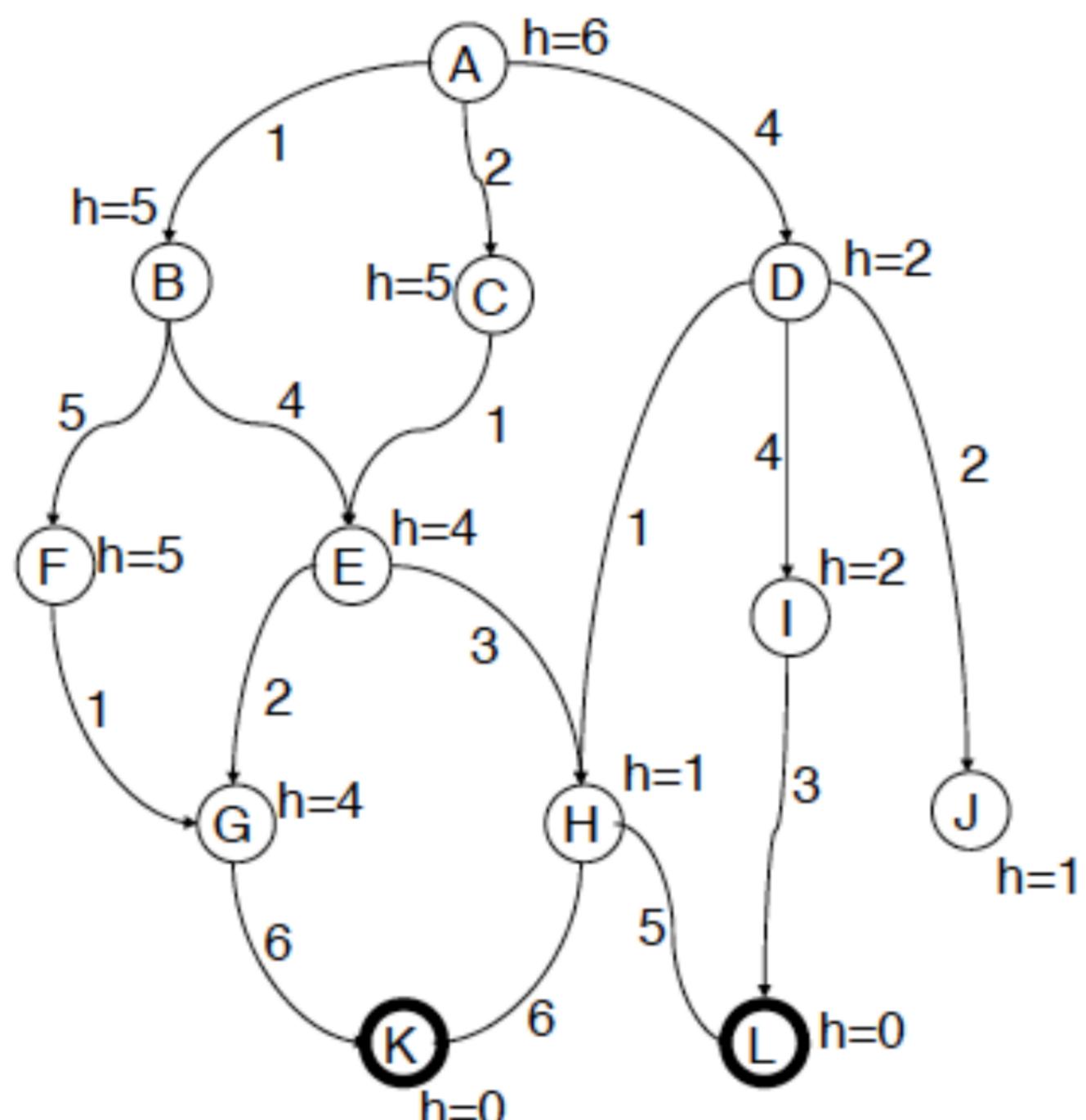
## Exercise (greedy best first and A\*, from A to the goal)



Modify the program from last class to implement the greedy best first and A\* search for this graph. Compare the solution paths. Play with the heuristics and see what different heuristic functions would yield as solutions. Play with weighted A\* with different weights, and compare.

## Homework (A\* Vacuum Cleaner)

You should be able to use much of the code from the first homework. You will need to make a few changes though.

- 1. The state of the search should be represented with three elements: a state, a path and a cost. Ultimately, cost is defined as the number of moves taken to achieve the goal state from the initial state.
- 2. While moves and paths look the same as before, solutions (output) are the path, the cost of the solution and the number of explored nodes.

Challenge: Can you generalize it?