

# Übungsblatt 1

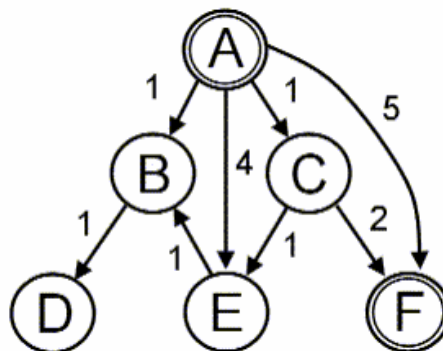
Abgabe: Mittwoch, 18.04.07 bis 13 Uhr

## Exercise 1 Introduction (20 Punkte)

- Define in your own words:
  - Intelligence
  - Artificial Intelligence
- Turing developed an operational test for artificial intelligent behaviour (Turing Test). Give examples of other tests that, in your opinion, could be used for measuring or observing intelligence in machines.
- Take the on-line Turing Test at <http://www.turinghub.com/>. Would the chatbot “Robby” pass the test in your opinion? If not, what made you believe that this would not really be a human?

## Exercise 2 Search (20 Punkte)

In the following search graph **A** is the start state and **F** is the goal state. Assume that for each search method a descendent node will be visited in alphabetical order when possible. The number in the edges denotes the step costs.



- In what order will the states be expanded by a depth-first search?
- In what order will the states be expanded by a breadth-first graph search?
- In what order will the states be expanded by a uniform-cost graph search?
- Which method performs better for this graph? Why?