Technische Universität München
Department of Computer Sciene
I6 - Robotics & Embedded Systems
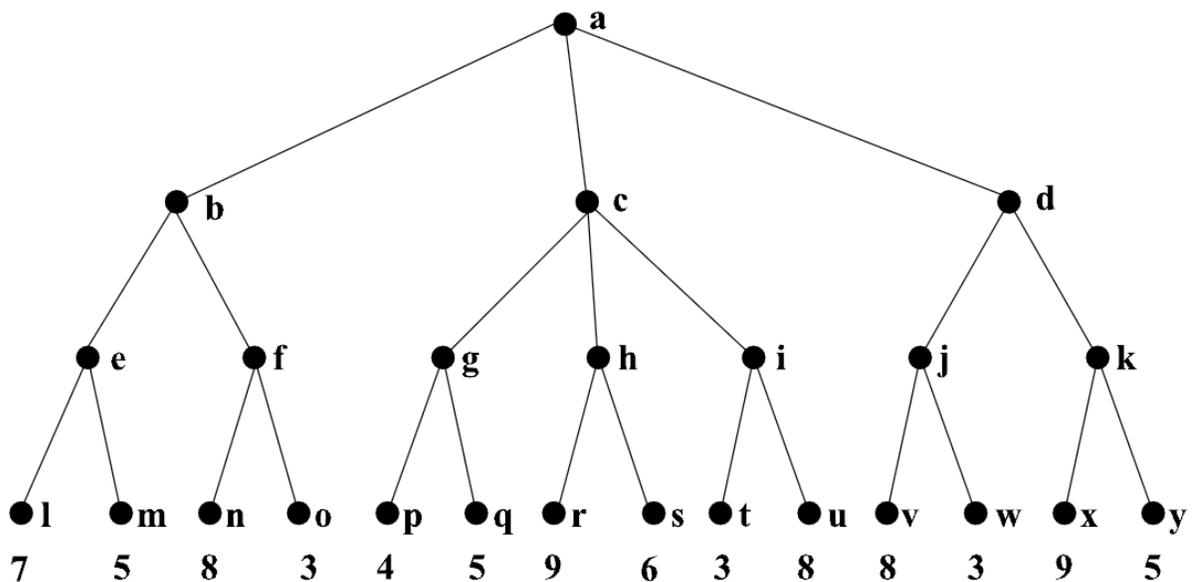Dr. Reinhard Lafrenz
WS 2012/13

Technische Universität München

Exercises for the Lecture

Techniques in Artificial Intelligence

10.12.2012 – Sheet 2

1) Adversarial Search, α-β-pruning

Consider the following search graph, player MAX starts at A.

a) What is the MiniMax-value of node A?

b) Show the steps of an α-β-search including the update of [min,max] and show the nodes not visited. Please write down the updates in the form a <- [min,max]. The search order is left-to right.

c) What is the sequence of actions given that both players act optimally? Explain.

d) Is it possible that in α-β-search all nodes as in Minimax need to be visited? Explain.