

**Algorithm Design**  
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**Solution of Exercise C-8.3**

The residual capacity of an augmenting path is the minimum capacity of one of its edges. Thus, we are interested in finding a maximum capacity path from  $s$  to  $t$ . We can perform this computation by using a maximum spanning tree algorithm, which is just like a minimum spanning tree algorithm with all the weights multiplied by  $-1$ . The path from  $s$  to  $t$  in this tree will be a maximum capacity path (using a similar argument used to prove the important fact about minimum spanning trees).