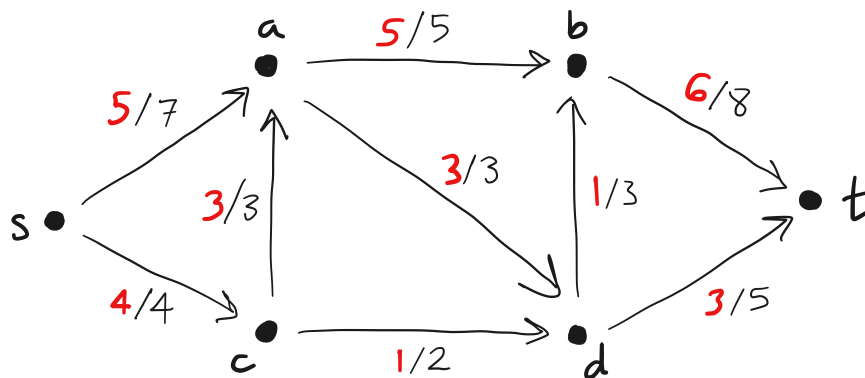


Here is a flow built by the Ford-Fulkerson algorithm. Is this a max flow, or can the algorithm continue for another step?



Algorithm to find a min-capacity cut  $(S, \bar{S})$  given a max flow  $f$ :

- Initialize  $S = \{s\}$
- While  $\exists x \in S$  and  $y \notin S$  so that either
  - $(x, y)$  is an arc with  $c(x, y) - f(x, y) > 0$ , **or**
  - $(y, x)$  is an arc with  $f(y, x) > 0$ ,
 add  $y$  to  $x$ .
- Output  $(S, \bar{S})$ .

