



(a) NFA for “ $a(b | c)^*$ ” (With States Renumbered)

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 $q_0 \leftarrow \epsilon\text{-closure}(\{n_0\});$ 
 $Q \leftarrow q_0;$ 
 $WorkList \leftarrow \{q_0\};$ 

while ( $WorkList \neq \emptyset$ ) do
  remove  $q$  from  $WorkList$ ;
  for each character  $c \in \Sigma$  do
     $t \leftarrow \epsilon\text{-closure}(\Delta(q, c));$ 
     $T[q, c] \leftarrow t;$ 
    if  $t \notin Q$  then
      add  $t$  to  $Q$  and to  $WorkList$ ;
  end;
end;

```