

Data: $G = (X, U)$ such that G^{tc} is an order.
Result: $G' = (X, V)$ with $V \subseteq U$ such that G'^{tc} is an interval order.

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begin
   $V \leftarrow U$ 
   $S \leftarrow \emptyset$ 
  for  $x \in X$  do
     $NbSuccInS(x) \leftarrow 0$ 
     $NbPredInMin(x) \leftarrow 0$ 
     $NbPredNotInMin(x) \leftarrow |ImPred(x)|$ 
  end
  for  $x \in X$  do
    if  $NbPredInMin(x) = 0$  and
       $NbPredNotInMin(x) = 0$  then
      AppendToMin( $x$ )
    end
  end
  while  $S \neq \emptyset$  do
    1 remove  $x$  from the list of  $T$  of maximal index
    REM
    2 while  $|S \cap ImSucc(x)| \neq |S|$  do
      for  $y \in S - ImSucc(x)$  do
        { remove from  $V$  all the arcs  $zy : \}$ 
        for  $z \in ImPred(y) \cap Min$  do
          remove the arc  $zy$  from  $V$ 
           $NbSuccInS(z) \leftarrow$ 
             $NbSuccInS(z) - 1$ 
          move  $z$  in  $T$  to the list preceding its
            present list
            {i.e. If  $z \in T[k]$ , move  $z$  from  $T[k]$ 
              to  $T[k - 1]$ }
        end
         $NbPredInMin(y) \leftarrow 0$ 
         $NbPredNotInMin(y) \leftarrow 0$ 
         $S \leftarrow S - \{y\}$ 
        AppendToMin( $y$ )
      end
    end
    end
    RemoveFromMin( $x$ )
  end
end
end

```

Algorithm 1: IntervalRestriction