Algorithm 2 I-conflict set discovery

function ICSETDISCOVER(T, $\wp(T)$) ▷ T: the set of operations of the target system, $\wp(T)$ is the power set of T
  if $T.processed ==$ `true` or $|T| == 0$ **then**
    return
  end if
  $result \leftarrow$ `false` ▷ `true` indicates that a subset of T is `I-conflict set`.
  for $j \leftarrow 2$ `to` $|T| - 1$ **do**
    let $\wp(T)_j$ be a subset of $\wp(T)$ s.t. each element in $\wp(T)_j$ has j operations.
    for all $T' \in \wp(T)_j$ **do** ICSETDISCOVER(T', $\wp(T')$)
      $result \leftarrow result | T'.isIConflict$
    end for
  end for
  if $result ==$ `false` **then** ▷ No subsets of T are `I-conflict set`, so we need to check T.
    if $|T| == 1$ **then** ▷ Check self-conflicting
      if $\neg(T_0.post \implies T_0.wpre)$ **then** ▷ T_0 is the 0-th element in T.
        $T.isIConflict \leftarrow$ `true`
      end if
    else if $|T| > 1$ **then**
      for $i \leftarrow 0$ `to` $|T| - 1$ **do** ▷ T_i is the i-th element in T.
        $post \leftarrow \wedge_{x \in T \setminus \{T_i\}} x.post$
        if $\neg(post \implies T_i.wpre)$ **then**
          $T.isIConflict \leftarrow$ `true`
          break
        end if
      end for
    end if
  end if
  $T.processed \leftarrow$ `true`
end function