Towards the Bakery Algorithm – 2

```
process ( p ∈ Procs )
  variables unchecked,  max = 0 ;
  { ncs: while ( TRUE )
          { e1:  unchecked := Procs \ {self} ;
            e2:  max := 0 ;
            e3:  while ( unchecked ≠ {} )
                   { with ( i ∈ unchecked )
                       { e4: unchecked := unchecked \ {i} ;
                         e5: if ( num[i] > max ) { max := num[i] }
                       }
                   } ;
                 with ( i ∈ {j ∈ Nat : j > max} ) { num[self] := i } ;
                 unchecked := Procs \ {self} ;
                 while ( unchecked ≠ {} )
                   {  with ( i ∈ unchecked )
                        { await  ∨ num[i] = 0
                                 ∨ ⟨num[self], self⟩ ≺ ⟨num[i], i⟩ ;
                          unchecked := unchecked \ {i}
                        }
                   } ;
                 skip ;    the critical section;
                 num[self] := 0 ;
          }
  }
```