Towards the Bakery Algorithm – 2

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

CLOSE