

N processes

var

number:array[0...n-1] of integer

$(a,b) < (c,d)$ if $a < c$ or if $a = c$ and $b < d$

$\max(a_0, \dots, a_{n-1})$ is a number, k such that $k \geq a_i$ for $i = 0 \dots n-1$

$\text{number}[i] = \max(\text{number}[0], \dots, \text{number}[n-1]) + 1$

for($j=0$ to $n-1$)

Do

While $\text{number}[j] \neq 0$ and $(\text{number}[j], j) < (\text{number}[i], i)$ do no_operation

end

CS

$\text{number}[i] = 0;$

....

N processes

var

number:array[0...n-1] of integer

max(a0,...,an-1) is a number, k such that $k \geq a_i$ for $i=0 \dots n-1$

number[i]=max(number[0],.....number[n-1])+1

for(j=0 to n-1)

Do

While number[j]!=0 and (number[j])<(number[i]) do no_operation

end

CS

number[i]=0;

....

number : array $[0, \dots, (n-1)]$ of integers

$(a, b) < (c, d)$ if $a \leq c$ and $b < d$.

$k = \max(a_i, a_{i+1}, \dots, a_{n-1})$ such that $k \geq$ all
 $a_i, a_{i+1}, \dots, a_{n-1}$

$\text{number}[i] = \max(\text{number}[0], \text{number}[1], \dots$
 $\dots \text{number}[n-1]) + 1;$

for ($j = 0$ to $n-1$)

{

while ($\text{number}[j] \neq 0$ and
 $(\text{number}[j], j) < \text{number}[i], i)$)

{

do no. op

}

}

es

$\text{number}[i] = 0;$