```
{0 (N) ⇒
[[]A < [0,1-1), A [0] > A[]
int m= AOJ;
{O<N ~; E[O, 1-1), MZ A[]]}
 the is 13
 { - ≤ N Λ J ∈ [0, î-1), m ≥ A ζij]]
 while (1 (N) {
      € [ ∠N Λ [j∈[0, î-1), m≥ A[j] Λ i CN] =>
      { it I A N je [o, it ) m > A [j]}
       [ M < (1) A]
           m (1) A N CDA (1-1.0) = [ N N 2 1+1 }
                                     A CO ≥ A CO J>
           ( [+1 S N N JEE, [-1], m2 A W ] A CET > A CET >
            m= A[1] 3
            ([TJA Sm / [DA Sm , 0-1, 0] = ] N N > 1x] }
        else
           { 1+1 \ N N Jec, i-1), m > A(J) N A(J) < M > >
            E st 1 & N N JE[ (1-1), m > A[] > M > A[] }
            skipi
            E 5+1 5 N N JEEO, 1-1, m > AUJ N m > AUJ J
        「= it()
        [ [ SA V JETO, I), m > A [ ] N m > A [ ]
 [ ; ≤ N N + J ∈ [ 0, 1) , m ≥ A [ , ] ] N 7 ≥ N 3 →
 [ J E [0, N), m > A []] = [ m = max (A [], -- , A[N-1])]
```

```
2.
{x≥on y>o3 ⇒
{x≥0 ∧ y>0 ∧ 0 (N ~ x= x+0)
THE V = Kj
{r≥0 ∧ y>0 ∧ 0 < N ∧ x=r+0 }
 int 9=0 ;
 ( r 20 V A SO V & CN V W= L+ 8A)
 while (y <-r) {
      [ r > 0 v A > 0 v d CN v A < r v V= LEGA? =>
      { r-y 20 ~ q+1 \le N ~ \ x= r-y+ (q+1) \ y}
      v = r-y;
       { r > 0 V d+1 < N V V= L+ (d+1) A}
       g= g+1 j
       (456 x 37 V N 7 & L+6-A)
  3
2 r≥0 nq≤N n y>r n x=r= 643 >>
  [K=qy+r V OZ r < A ]
```

```
904 N3 →
     {OGOSN N N,y ∈[0, 1-1), NSJ = ACN SACY)}
        inti- 15
      ¿OSi < N+( Λ x,y∈[·,i-i), x≤y → Acx) ≤ Acy) }
        while (i < N) {

(i < N) {

(i < N) }

(i < N) }
                                fo < i < v ^ v ,y ∈ [·, i-). N=y ⇒ AT&J ≤ PTJJ , v o j ∈ [i-1, i-1) , x = y
                                                                                                                                                                                                                                                                                   ⇒ Acko <Acho
                                  iht j= i
                               {OSIJCNA *xy E[O, I-1) , X ≤ x > A(X) ≤ A(Y) } Axy € [O , I +) , X ≤ x > A(X) ≤ A(Y) }
                                    whole (j > 0 65 ACJ-17 > ACJ) > {
                                            (0-5.3< N x N x (1-1.0) x x y → ACAD 4 C(2) A × N x (1-1.0) + x x x x (1-1.0)
                                                               Λĵ>0 × A[]-(] > A[]] } →
                                         Essij (N , My E[0, i-1), Ney > A[N] < A[y] ~ My E[0 ]-1), Ney > A[N] < A[y] ~ [>0)
                                                    nt ty Aci-17 3d
                                           [05] j < N ~ "xy ∈ [0, i-1), x ≤y > A[x] ≤ A[y] ~ x,y ∈ [ 0 ,j-1), x ≤y → A[x] ≤ A[y] ~ j>0)
                                                      ACJ-17 = ACT7;
                                            [05] (N ~ *xy &[0, 1-1), Xey > A[x] < A[y] ~ x,y &[ 0 , j-1), Xey > A[x] < A[y] ~ [>0)
                                             (05) j < N . * xy & [0, i-1), NEY > ACK] < ACY] ~ x,y & [ 0 ] -1), XEY = ACK] < ACY] ~ [ >0)
                                                        ز ۱-۱ ۽ آ
                                          (05:1, (N , xy c[0, 1-1), xey > A[x] < A[y] , xy + (0, 1), xey > A[x] < A[y] , xey > A[x] ≤ A[y] , xey > A[x] < A[x] ≤ A[y] , xey > A[x] < A[x] <
                               [05] (WA xy E[0, 1-1), XEy > A[N] & A[y] A x,y E[ 0, ]), XEY > A[X] & A[y] A[y]
                                                               \(\( \left( \reft( \left( \left( \left( \left( \left( \reft( \left( \reft( \teft( \reft( 
                               [OSICN NAWAECO'IN) WER = YEWS YED]
                                 (0< i < N N M M = [0, i), asy = ALAS = ATAS ATAS
 { o ( i ≤ N n x x y ∈ [ o, i ) , x ≤ y » A [ x ] ≤ A [ y ] ∧ i ≥ N ] »
```