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1: function DEADEND( $N, x, y$ )
2:   for  $m=0$  to  $xlength$  do
3:      $neighbourcount \leftarrow 0, count \leftarrow 0$ 
4:     for  $i=0$  to  $xlength$  do
5:        $a \leftarrow x[i] - x[m]$ 
6:        $b \leftarrow y[i] - y[m]$ 
7:       if  $a == 0$  and  $b == 0$  then
8:         continue
9:       end if
10:       $pointradius \leftarrow \sqrt{a^2 + b^2}$ 
11:       $\Theta \leftarrow atan(b/a)$ 
12:       $\Theta \leftarrow \Theta * (180/3.145926)$ 
13:      if  $a < 0$  and  $b > 0$  then
14:         $\Theta \leftarrow 180 - \Theta$ 
15:      end if
16:      if  $a < 0$  and  $b < 0$  then
17:         $\Theta \leftarrow 180 + \Theta$ 
18:      end if
19:      if  $a > 0$  and  $b < 0$  then
20:         $\Theta \leftarrow 360 - \Theta$ 
21:      end if
22:       $updatedAnglesList[i] \leftarrow angle$ 
23:      if  $pointradius \leq r$  then
24:         $neighbourcount++$ 
25:        for  $k=0$  to  $360$  do
26:          if  $\Theta \geq k$  and  $\Theta < k + deg$  then
27:             $j \leftarrow ((k + deg)/deg) - 1$ 
28:             $hash[j]++$ 
29:          end if
30:        end for
31:      end if
32:    end for
33:    for  $w=0$  to  $hashlength$  do
34:      if  $hash[w] == 0$  then
35:         $count++ ; ind[count-1] \leftarrow w$ 
36:      end if
37:    end for
38:    if  $count == 0$  then
39:       $NoDeadend$ 
40:    else
41:       $Deadend$ 
42:      for  $q=0$  to  $indlength$  do
43:        Call  $SelectPoint(ind[q])$ 
44:      end for
45:    end if
46:    Call  $QuadrantPoints()$ 
47:  end for
48: end function

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