```
1: function INITIATE(nodes)
       \mathbf{for}\ i\ 0\ to\ nodes.size\ \mathbf{do}
2:
           if i is hole boundary node then
3:
               if i has no hole boundary neighbours then
4:
5:
                   add i to initiators
               else if i has minimum id than its hole boundary neighbours then
6:
7:
                  add i to initiators
               end if
8:
           end if
9:
       end for
10:
       for i 0 to initiators.size do
11:
           i.table.nodeSeq \leftarrow i.id
12:
           i.table.type \leftarrow 0
13:
           i.broadcast()
14:
           upon receiving all messages if any two messages
15:
           if first id's are same, last id's are different and not neighbours then
16:
               this is considered as cycle
17:
               If this is not already found it will be added to holes
18:
              If one cycle bounds other then minimum cycle is kept
19:
           end if
20:
       end for
21:
22: end function
```