```
1: function SELECTCYCLE(nodes)
 2:
         \mathbf{for}\ i\ \theta\ to\ nodes.size\ \mathbf{do}
             N_i^{\ 1} is 1-hop neighbours of node i N_i^{\ 2} is 2-hop neighbours of node i if S1 intersects N_i^{\ 1} then
 3:
 4:
 5:
                  Connect neighbour to that node
 6:
                  if S2 intersects N_i^2 then
 7:
                       If this cycle is minimum, keep this and discard previous
                  end if
 9:
              end if
10:
11:
         end for
12: end function
```