```
DFS-iterative (G, s):
S.push(s)
           //Inserting s in stack
mark s as visited.
while (S is not empty):
    //Pop a vertex from stack to visit next
    v = S.top()
   S.pop()
   //Push all the neighbours of v in stack that are not visited
  for all neighbours w of v in Graph G:
      if w is not visited:
               S.push(w)
              mark w as visited
```