```
main():
    initalize parent array, mark all as unvisited, make discovery/earliest inf,
    bridgeFind(0, u)


bridgeFind(clock, v):
    marked[v] = True
    discovery[v] = clock
    earliest[v] = clock
    clock = clock++
    for u in v's adjacent vertices
        if marked[u] == False:
            parent[u] = v
            bridgeFind(clock, u)
            earliest[u]= min(earliest[v], earliest[u])
            //if the node with min discovery time from u is lower than v we have a bridge
            if(earliest[u] > discovery[v]):
                return (u,v)
        else if parent[u] != v:
            earliest[v] = min(earliest[v], discovery[u])
```