

lec1_step6

October 14, 2020

```
In [1]: TargetGraph={
        'S': ['A', 'B'],
        'A': ['S', 'C', 'D'],
        'B': ['S', 'C'],
        'C': ['A', 'B', 'D'],
        'D': ['A', 'C']
        #   'G': 'unknown now'
    }

In [4]: OpenList=['S']
        ClosedList=[]
        while OpenList:
            state=OpenList[-1] # the last item
            del OpenList[-1] # the last item
            ClosedList.append(state)
            print(state)
            if state=='G':
                break
            #   activeNodes=TargetGraph[state]
            activeNodes=[item for item in TargetGraph[state] if item not in ClosedList]
            OpenList.insert(0, activeNodes)
            #   OpenList=[item for i in OpenList for item in i]
            OpenList=[item for i in OpenList for item in i if item not in ClosedList]
            print('completed')
```

```
S
B
A
C
D
completed
```

```
In [ ]:
```