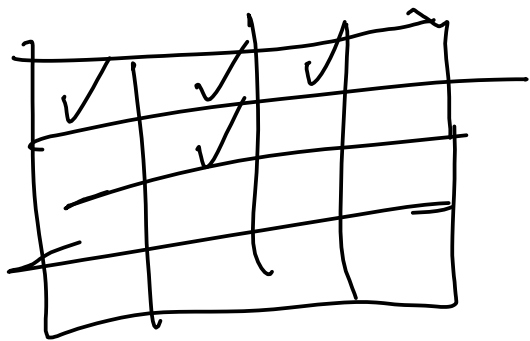


Depth-first search (DFS)

- Where you've been
- Choices didn't make (yet)



“Garage - front”

Foyer - south

Foyer - east

Driveway - south

Home — Google — Google SR —

Swat CS

ADT — Stack

push — adds element
pop — removes element
getSize
isEmpty

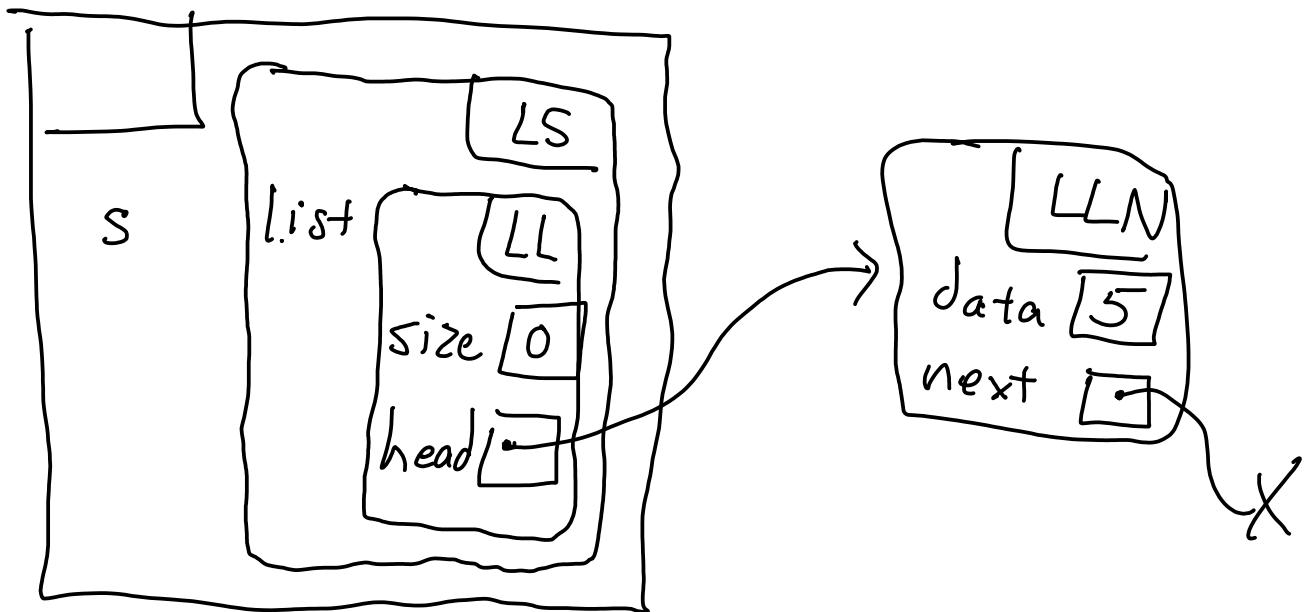


LinkedStack<int> s;

s.push(5); ←

s.push(4);

s.pop();



```

here ← front_walk
where I've Been ← new grid
where I Didn't Go ← new Stack
while !where I Didn't Go.isEmpty():
    here ← where I Didn't Go.pop()
    where I've Been.mark(here)
    for each valid direction d:
        where I Didn't Go.push(here, d)

```

where I Didn't Go
 .push
 (start)



```

where I Didn't Go.push((front_walk, south))
where I Didn't Go.push((front_walk, east))

```