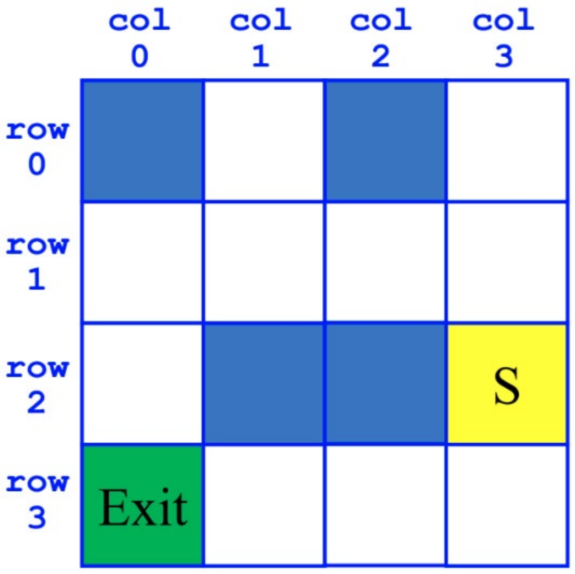
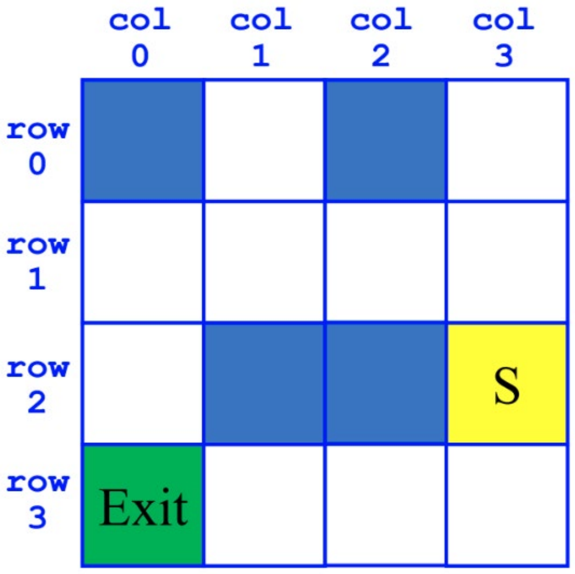


SearchForTheExit

```
Initialize a Queue to hold Squares as we search
Mark starting square as visited
Enqueue starting square on Queue
While Queue is not empty
    Dequeue square sq from Queue
    Mark sq as visited
    If sq is the Exit, we're done!
    For each of square's unvisited neighbors (S, W, N, E):
        Set neighbor's previous to sq
        Enqueue neighbor to Queue
```



SearchForTheExit

```
Initialize a Stack to hold Squares as we search
Mark starting square as visited
Push starting square on Stack
While Stack is not empty
    Pop square sq from Stack
    Mark sq as visited
    If sq is the Exit, we're done!
    For each of square's unvisited neighbors (S, W, N, E):
        Set neighbor's previous to sq
        Push neighbor to Stack
```

Abstract Data Types (In Java, Interfaces)

Data Structures (In Java, implementing classes)

Maze images & pseudocode from Christine Alvarado and Cynthia Lee

CSE12F20-Oct16-1

```
class Sort1 {

    public static boolean isSorted1(int[] arr) {
        for(int i = 0; i < arr.length - 1; i += 1) {
            if(arr[i] > arr[i + 1]) { return false; }
        }
        return true;
    }
}
```

```
# isSorted1 in Python
def is_sorted1(lst):
    for i in range(0, len(lst) - 1):
        if lst[i] > lst[i + 1]: return False
    return True
```

```
class Sort2 {

    public static boolean isSorted2(int[] arr) {
        for(int i = 0; i < arr.length; i += 1) {
            for(int j = i + 1; j < arr.length; j += 1) {
                if(arr[i] > arr[j]) { return false; }
            }
        }
        return true;
    }
}
```