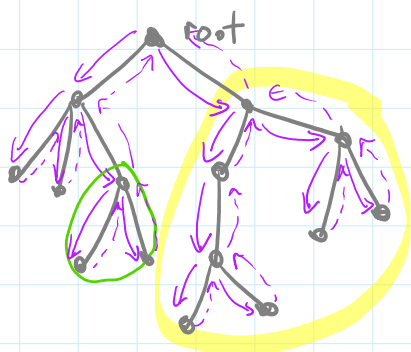


DEPTH-FIRST SEARCH



WARM-UP:

$n=6$

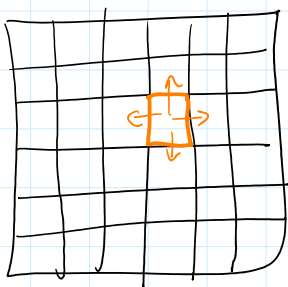


Recursive function to search this column:

```
def search(row):
    print("searching row", row)
    # search the square below
    if row < n-1:
        search(row+1)
    print("finished searching row", row)
```

2D GRID:

$n \times n$ grid



```
def search(row, col):
    print("searching row", row, "col", col)

    if _____: # search down
        search(row+1, col)

    if _____: # search left
        search(row, col-1)

    if _____: # search right
        search(row, col+1)

    if _____: # search up
        search(row-1, col)

    print("finished", row, ",", col)
```