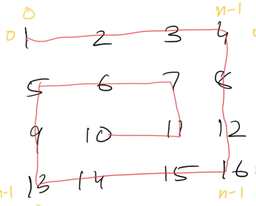
Spiral matrix



cover top, right, bottom then left boundary

srow = 0 scol = 0
erow = m-1 erow = n-1

(1) Top
```
for (j = scol to ecol)
    mat[srow][j]
```

(2) Right
```
for (j = srow+1 to erow)
    mat[i][ecol]
```

(3) Bottom
```
for (j = ecol-1 to scol)
    mat[erow][j]
```

(4) Left
```
for (i = erow-1 to srow+1)
    mat[i][scol]
```

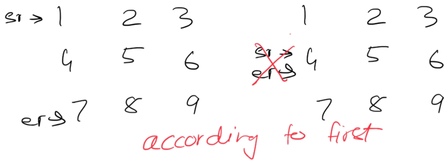
To shift inwards
```
srow ++    scol++
erow --    ecol--
```

While condition

when sr > er → duplicates
sc > ec ↗

sr < er or sr <= er ?

it no of rows is odd
sr & er will never be equal and which row print hi nahi hoga

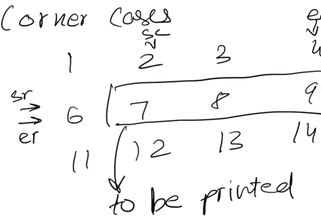


according to first

∴ sr <= er !!

sc <= ec

Corner cases



to be printed

sr = er ⇒ top boundary = bottom boundary

according to the for loops 7 8 9 will be printed twice because top boundary is there and bottom boundary is also there

same logic for colums

Bottom
```
for (j = ecol-1 to scol)
    if (srow == erow) {
        break
    }
    mat[erow][j]
```

Left
```
for (i = erow-1 to srow+1)
    if (scol == ecol) {
        break
    }
    mat[i][scol]
```

Time complexity
O(m * n)