[**Spiral Traversing of matrix:**](https://www.geeksforgeeks.org/problems/spirally-traversing-a-matrix-1587115621/1)

**Code:**

import java.util.\*;

class Solution {

public ArrayList<Integer> spirallyTraverse(int mat[][]) {

ArrayList<Integer> res = new ArrayList<>();

int i\_start = 0, i\_end = mat.length - 1;

int j\_start = 0, j\_end = mat[0].length - 1;

while (i\_start <= i\_end && j\_start <= j\_end) {

// Traverse from left to right

for (int j = j\_start; j <= j\_end; j++) {

res.add(mat[i\_start][j]);

}

i\_start++;

// Traverse from top to bottom

for (int i = i\_start; i <= i\_end; i++) {

res.add(mat[i][j\_end]);

}

j\_end--;

// Traverse from right to left (if rows remain)

if (i\_start <= i\_end) {

for (int j = j\_end; j >= j\_start; j--) {

res.add(mat[i\_end][j]);

}

i\_end--;

}

// Traverse from bottom to top (if columns remain)

if (j\_start <= j\_end) {

for (int i = i\_end; i >= i\_start; i--) {

res.add(mat[i][j\_start]);

}

j\_start++;

}

}

return res;

}

}

**2) Counting Zeros after ones**

1)Using Nested Loop: O(n^2)

// Online Java Compiler

// Use this editor to write, compile and run your Java code online

import java.util.\*;

class Main {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int n;

System.out.println("Enter the size of array:");

n = sc.nextInt();

int arr[] = new int[n];

System.out.println("Enter the array elements (0/1)");

for(int i=0;i<n;i++){

arr[i] = sc.nextInt();

}

System.out.println("Elements are:");

for(int i=0;i<n;i++){

System.out.println(arr[i]);

}

int count =0;

for(int i=0;i<n;i++){

if(arr[i] == 1){

for(int j=i+1;j<n;j++){

if(arr[j] ==0){

count++;

}

}

}

}

System.out.println("Zeros count is:"+count);

}

}

**Output:**

Enter the size of array:

6

Enter the array elements (0/1)

1

0

1

0

0

1

Elements are:

1

0

1

0

0

1

Zeros count is:5

2) Right to Left (O(n))

import java.util.\*;

class Main {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int n;

System.out.println("Enter the size of array:");

n = sc.nextInt();

int arr[] = new int[n];

System.out.println("Enter the array elements (0/1)");

for(int i = 0; i < n; i++) {

arr[i] = sc.nextInt();

}

System.out.println("Elements are:");

for(int i = 0; i < n; i++) {

System.out.println(arr[i]);

}

int count = 0;

int zeroCount = 0;

for(int i = n - 1; i >= 0; i--) {

if(arr[i] == 0) {

zeroCount++;

} else {

count += zeroCount;

}

}

System.out.println("Zeros count is: " + count);

}

}

Output:

Enter the size of array:

6

Enter the array elements (0/1)

1

0

1

0

0

1

Elements are:

1

0

1

0

0

1

Zeros count is: 5

Output 2:

Enter the size of array:

6

Enter the array elements (0/1)

0

1

0

0

1

1

Elements are:

0

1

0

0

1

1

Zeros count is: 2

**DAY 2: WORKED ON GITHUB**

C:\Users\tanya>E:

E:\>cd E:\JAVA FULLSTACK INTERNSHIP

E:\JAVA FULLSTACK INTERNSHIP>**git init**

Initialized empty Git repository in E:/JAVA FULLSTACK INTERNSHIP/.git/

E:\JAVA FULLSTACK INTERNSHIP>ls

'ls' is not recognized as an internal or external command,

operable program or batch file.

E:\JAVA FULLSTACK INTERNSHIP>**git add CountZeros.java**

E:\JAVA FULLSTACK INTERNSHIP>**git commit -m "Added MyProgram.java"**

[master (root-commit) ad5113d] Added MyProgram.java

1 file changed, 34 insertions(+)

create mode 100644 CountZeros.java

E:\JAVA FULLSTACK INTERNSHIP>**git remote add origin https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1.git**

E:\JAVA FULLSTACK INTERNSHIP>git push origin main

error: src refspec main does not match any

error: failed to push some refs to 'https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1.git'

E:\JAVA FULLSTACK INTERNSHIP>**git branch**

\* master

E:\JAVA FULLSTACK INTERNSHIP>**git push origin master**

Enumerating objects: 3, done.

Counting objects: 100% (3/3), done.

Delta compression using up to 8 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 554 bytes | 277.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

remote:

remote: Create a pull request for 'master' on GitHub by visiting:

remote: https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1/pull/new/master

remote:

To https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1.git

\* [new branch] master -> master

E:\JAVA FULLSTACK INTERNSHIP>**git status**

On branch master

Untracked files:

(use "git add <file>..." to include in what will be committed)

June\_Java.docx

New Text Document.txt

~$ne\_Java.docx

nothing added to commit but untracked files present (use "git add" to track)

E:\JAVA FULLSTACK INTERNSHIP>git checkout main'

error: pathspec 'main'' did not match any file(s) known to git

E:\JAVA FULLSTACK INTERNSHIP>**git checkout master**

Already on 'master'

***// in master, I confirmed that there are no errors so that now I want to merge to main branch:-***

E:\JAVA FULLSTACK INTERNSHIP>**git checkout -b main**

Switched to a new branch 'main'

E:\JAVA FULLSTACK INTERNSHIP>**git add CountZeros.java**

E:\JAVA FULLSTACK INTERNSHIP>**git commit -m "Manually added CountZeros.java"**

On branch main

Untracked files:

(use "git add <file>..." to include in what will be committed)

June\_Java.docx

New Text Document.txt

~$ne\_Java.docx

nothing added to commit but untracked files present (use "git add" to track)

E:\JAVA FULLSTACK INTERNSHIP>**git push origin main**

To https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1.git

! [rejected] main -> main (fetch first)

error: failed to push some refs to 'https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1.git'

hint: Updates were rejected because the remote contains work that you do not

hint: have locally. This is usually caused by another repository pushing to

hint: the same ref. If you want to integrate the remote changes, use

hint: 'git pull' before pushing again.

hint: See the 'Note about fast-forwards' in 'git push --help' for details.

E:\JAVA FULLSTACK INTERNSHIP>**git fetch origin**

remote: Enumerating objects: 3, done.

remote: Counting objects: 100% (3/3), done.

remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

Unpacking objects: 100% (3/3), 876 bytes | 125.00 KiB/s, done.

From https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1

\* [new branch] main -> origin/main

E:\JAVA FULLSTACK INTERNSHIP>**git checkout main**

Already on 'main'

E:\JAVA FULLSTACK INTERNSHIP>**git pull origin main --allow-unrelated-histories**

From https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1

\* branch main -> FETCH\_HEAD

Merge made by the 'ort' strategy.

README.md | 1 +

1 file changed, 1 insertion(+)

create mode 100644 README.md

***//esc , :wq , enter***

E:\JAVA FULLSTACK INTERNSHIP>**git push origin main**

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 8 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (2/2), 355 bytes | 355.00 KiB/s, done.

Total 2 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

To https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1.git

60415ef..eb72673 main -> main

E:\JAVA FULLSTACK INTERNSHIP>**git status**

On branch main

Untracked files:

(use "git add <file>..." to include in what will be committed)

June\_Java.docx

New Text Document.txt

~$ne\_Java.docx

nothing added to commit but untracked files present (use "git add" to track)

E:\JAVA FULLSTACK INTERNSHIP>**git log --oneline --graph**

\* eb72673 (HEAD -> main, origin/main) Merge branch 'main' of https://github.com/TanyaCoder-27/JAVA\_FULLSTACK\_1

|\

| \* 60415ef Initial commit

\* ad5113d (origin/master, master) Added MyProgram.java

AUTHENTICATION ISSUE: Go ahead and create PAT (Classic) [from Public Profile -> Settings -> Developer Settings] with Scope of repo checked. Then simply use the following command:

git remote set-url origin [https://<TOKEN>@github.com/yourusername/repository.git](https://%3cTOKEN%3e@github.com/yourusername/repository.git)

<TOKEN> is replaced by the original PAT url.

**JAVA PROGRAMS:**

// Swap two numbers

//Area and perimeter of triangle

//String reverse

//Prime numeber or not

// Fibonacci

// Print pattern