Result & Analysis

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Attempt 1

IP Address: 117.239.104.11, 49.37.137.195 Tab switches: 0 OS used: Windows Browser used: Chrome

Test Duration: 04:10:19 Test Start Time: Oct 11, 2022 | 12:23 PM Test Submit Time: Oct 12, 2022 | 10:28 AM

Resume Count: 4

Overall score

150 7 (50 Rank: NA

Topper score: 150.00 / 150

Average score: 17.88 / 150

Least score: 0.00 / 150

Coding



Rank: NA

Topper score: 150.00 / 150

Average score: 138.18 / 150

Least score: 20.00 / 150

Overall Question Status

Total Questions: 15

Questions Attempted: 15

Ouestions Correct: 15

Question Wrong: 0

Coding - Question Status

Total Questions: 15

Questions Attempted: 15

Ouestions Correct: 15

Question Wrong: 0







Topic wise An...

Coding

Question No: 1

Single File Programming Question

Report Error

Write a program to find the first and last occurrence of an element in a sorted array.

Input format

The first line of the input consists of the value n.

Next input is the array elements.

The last input is the element.

Output format

The output prints the first and last occurrence of the element separated by a space.

| Input 1 | Output 1 |
|----------------------------------|----------|
| 9 1 3 5 5 5 5 67 123 125 5 | 2 5 |
| Input 2 | Output 2 |

```
9
1 3 5 5 5 7 123 125
```

```
Java (11)
    class Main{
        public static void main(String args[]){
            Scanner scan = new Scanner(System.in);
            int total = scan.nextInt();
            int array[] = new int[total];
            for(int i=0;i<total;i++){</pre>
                 array[i] = scan.nextInt();
            int search = scan.nextInt();
            int first=0,last=0;
11
            for(int i=0;i<total;i++){</pre>
12 -
                if(array[i]==search){
13 -
14
                     first = i;
15
                     break;
16
17
18 -
            for(int i=0;i<total;i++){</pre>
19 -
                 if(array[i]==search){
                     last = i;
21
22
            System.out.println(first + " " + last);
23
24
25
```

Times submitted: 1 Level: Hard Question type: Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

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Question No: 2

Single File Programming Question

Report Error

Weighing machines in Sunrise Logistics is not working. Raju, the manager of the division wants to calculate the total weight of received goods. Weight is printed in the goods label. Write a suitable code to help Raju.

Input format

Number of received goods in first line.

Weight of goods in Second line (Space separated).

Output format

The output prints the total weight.

| Input 1 | Output 1 |
|---------------------------|----------|
| 10 1 9 2 8 3 7 4 6 8 6 | 54 |



```
Scanner scan = new Scanner(System.in);
            int terms = scan.nextInt();
            int a[] = new int[terms];
            int sum=0;
            for(int i=0;i<terms;i++){</pre>
                a[i] = scan.nextInt();
10
                sum+=a[i];
11
            System.out.println(sum);
12
13
14 }
```

Times submitted: 2 Level: Easy Question type: Single File Programming

Subject: Programming Subject: Arrays

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Question No: 3 Single File Programming Question

Report Error

Write a program to find all pairs of elements in an array whose sum is equal to the given value. Help Guru to

write a program to complete this task.

Input format

Required Sum in first line.

Number of array elements in the second line.

Array elements in third line separated by space.

Output format

Number pair with sum as shown in the sample output.

```
Input 1

30

8

-15 + 45 = 30

14 -15 9 16 25 45 12 8
```

Times submitted: 4 Level: Hard Question type: Single File Programming

Subject: Programming Subject: Arrays

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Question No: 4

Single File Programming Question

Report Error

Given an array of elements. Find two elements in the array such that their sum is equal to the given element K?

Input format

The first line of the input consists of the value of n.

The next input is the array elements.

The last input is the sum.

Output format

The output prints whether the array has a pair of elements with the given sum. Refer sample output for formatting specifications.

| Input 1 | Output 1 |
|---------------------------|---|
| 6 1 4 45 6 10 -8 16 | Array has two elements with given sum 16 |
| Input 2 | Output 2 |
| 6 1 4 45 6 10 -8 60 | Array doesn't have two elements with given sum 60 |



```
int count=0;
11
             for(int i=0;i<terms;i++){</pre>
12 -
                 for(int j=i+1;j<terms;j++){</pre>
13 -
                     if((a[i]+a[j])==total){
14 -
15
                          count++;
16
17
18
            if(count>=1){
19 -
                 System.out.println("Array has two elements with given sum " + total);
             }else{
21 -
                 System.out.println("Array doesn't have two elements with given sum " + total);
22
23
```

Times submitted: 4 Level: Medium Question type: Single File Programming

Subject: Programming Subject: Arrays

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Question No: 5 Single File Programming Question

Report Error

Find largest and smallest number in an array.

Input format

Input consists of n+1 integer inputs.

First line of the input describes the array size 'n',

Followed by n number of array elements.

Output format

Output displays the smallest and largest number in the array.

Sample testcases

| Input 1 | Output 1 |
|-------------------|--------------------|
| 5 | smallest value: 2 |
| 12 4 2 5 22 | largest value: 22 |
| Input 2 | Output 2 |
| 6 | smallest value: 4 |
| 20 30 50 4 71 100 | largest value: 100 |

Blacklist

Arrays.sort

```
max=a[0];
14
             for(int i=1;i<terms;i++){</pre>
15 -
                 if(a[i]>max){
17
                      max=a[i];
18
                 if(a[i]<min){</pre>
19 -
                      min=a[i];
20
21
22
             System.out.print("smallest value: "+min);
23
             System.out.print("\nlargest value: "+max);
```

Times submitted: 1 Level: Medium Question type: Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

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Question No: 6 Single File Programming Question

Report Error

Given an array **A** consists of **N** number of elements. If the sum of the element is "even" print the sum of the element. If the sum of the element is "odd" print the product of the element.

Input format

The first line of input contains the number of elements NThe second line of input represents the elements $A_1, A_2, A_3 \dots A_N$

Output format Prints the desired result

```
      Input 1
      Output 1

      5
      16

      1 2 3 4 6
      Output 2

      4
      530400

      10 20 52 51
      530400
```

```
Java (11)
                                                                                                   1 import java.util.Scanner;
 2 class Main{
        public static void main(String args[]){
            Scanner scan = new Scanner(System.in);
            int terms = scan.nextInt();
            int a[] = new int[terms];
            int sum=0,product=1;
            for(int i=0;i<terms;i++){</pre>
                a[i] = scan.nextInt();
                sum+=a[i];
10
                product*=a[i];
11
12
            if(sum%2==0){
13 -
                System.out.println(sum);
14
            }else{
15 -
                System.out.println(product);
17
```

18 }

Status: Correct Mark obtained: 10/10 Hints used: 0 Times compiled: 1

Times submitted: 1 Level: Medium Question type: Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

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Question No: 7

Single File Programming Question

Report Error

Johnsy wants to create a matrix in which the elements are formed differently. The elements are formed by adding the values of their index positions. Write a program that obtains the order of the matrices and creates a matrix by adding the values of their index positions.

Input format

The input line consists of the order of the matrices m and n separated by a space.

Output format

The output prints the matrix elements in matrix format. The elements are formed by adding the values of their index positions.

Give a tab space between the elements.

Refer sample input and output for formatting specifications.

| Input 1 | Outp | ut 1 | |
|---------|------|------|---|
| 3 3 | 0 | 1 | 2 |
| | 1 | 2 | 3 |
| | 2 | 3 | 4 |

```
Java (11)
                                                                                                    1 import java.util.Scanner;
 2 class Main{
        public static void main(String args[]){
            Scanner scan = new Scanner(System.in);
            int row = scan.nextInt();
            int column = scan.nextInt();
            int a[][] = new int[row][column];
            for(int i=0;i<row;i++){</pre>
                for(int j=0;j<column;j++){</pre>
                    System.out.printf("%d\t",i+j);
11
12
                System.out.println();
13
14
15
16
```

Times submitted: 1 Level: Easy Question type: Single File Programming

Subject: Programming Subject: Arrays

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Question No: 8

Single File Programming Question

Report Error

Write a program to obtain a matrix and find the sum of the elements in the upper triangular matrix(i.e., the elements on the diagonal and the upper elements).

Note: Only square matrix

Input format

The first line of the input consists of the number of rows and columns.

The next input is the matrix.

Output format

The output prints the sum of the upper triangular matrix.

| Input 1 | Output 1 |
|---------|----------|
| 3 3 | 29 |
| 6 5 4 | |

```
1 2 5
7 9 7

Input 2

3 3

12 23 45
56 78 89
95 51 20
```

```
Java (11) 🗸
                                                                                                       1 import java.util.Scanner;
 2 class Main{
        public static void main(String args[]){
            Scanner scan = new Scanner(System.in);
            int row = scan.nextInt();
            int column = scan.nextInt();
                 int a[][] = new int[row][column];
                 for(int i=0;i<row;i++){</pre>
                     for(int j=0;j<column;j++){</pre>
                         a[i][j] = scan.nextInt();
10
11
12
13
                int sum=0;
                 for(int i=0;i<row;i++){</pre>
14 -
                     for(int j=0;j<column;j++){</pre>
15 -
                         if(i<=j){
16 -
                              sum+=a[i][j];
17
18
19
20
                System.out.println(sum);
21
22
```

Times submitted: 1 Level: Medium Question type: Single File Programming

Subject: Programming Subject: Arrays

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Question No: 9

Single File Programming Question

Report Error

Write a program to obtain a matrix and find the sum of the elements in the lower triangular matrix(i.e., the elements on the diagonal and the lower elements).

Note: Only square matrix

Input format

The first line of the input consists of the number of rows and columns.

The next input is the matrix.

Output format

The output prints the sum of the upper triangular matrix.

| Input 1 | Output 1 |
|---------|----------|
| 3 3 | 32 |

```
6 5 4
1 2 5
7 9 7

Input 2

Output 2

3 3

12 23 45
56 78 89
95 51 20
```

```
Java (11) 🗸
 1 import java.util.Scanner;
 2 class Main{
        public static void main(String args[]){
            Scanner scan = new Scanner(System.in);
            int row = scan.nextInt();
            int column = scan.nextInt();
            int sum=0;
            int a[][] = new int[row][column];
            for(int i=0;i<row;i++){</pre>
                for(int j=0;j<column;j++){</pre>
11
                    a[i][j] = scan.nextInt();
                    if(i>=j){
12 -
                        sum+=a[i][j];
13
14
15
16
17
            System.out.println(sum);
18
19 }
```

Times submitted: 1 Level: Medium Question type: Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

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Question No: 10 Single File Programming Question

Report Error

Write a program to obtain a matrix and find the sum of its diagonal elements.

Note: Only square matrix.

Input format

The input consists of the number of rows and columns separated by a space.

The next input is the matrix.

Output format

The output prints the sum of diagonal elements.

| Input 1 | Output 1 |
|---------|----------|
| 3 3 | 15 |
| 1 2 3 | |

```
4 5 6
7 8 9

Input 2

4 4

Output 2

191
```

12 23 45 56 78 89 98 87 65 54 32 21 14 25 36 58

> 19 20

```
Java (11) 🗸
 1 import java.util.Scanner;
 2 class Main{
        public static void main(String args[]){
            Scanner scan = new Scanner(System.in);
            int row = scan.nextInt();
            int column = scan.nextInt();
            int a[][] = new int[row][column];
            for(int i=0;i<row;i++){</pre>
                 for(int j=0;j<column;j++){</pre>
                     a[i][j] = scan.nextInt();
10
11
12
13
            int sum=0;
            for(int i=0;i<row;i++){</pre>
14 -
                 for(int j=0;j<column;j++){</pre>
15 -
                     if(i==j){
16 -
17
                         sum+=a[i][j];
18
```

```
System.out.println(sum);
22 }
23 }
```

Times submitted: 1 Level: Medium Question type: Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

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Question No: 11

Single File Programming Question

Report Error

Write a program to obtain a matrix and find the sum of each row and each column.

Input format

The first line of the input consists of the value of the number of rows and the number of columns. The next input is the matrix.

Output format

The output prints the sum of each row and each column.

Refer sample input and output for formatting specifications.

| Input 1 | Output 1 |
|---------|-----------------------|
| 4 4 | Sum of the row 0 = 10 |

```
Sum of the row 1 = 26
1 2 3 4
5 6 7 8
                                                     Sum of the row 2 = 42
9 10 11 12
                                                     Sum of the row 3 = 58
13 14 15 16
                                                     Sum of the column 0 = 28
                                                     Sum of the column 1 = 32
                                                     Sum of the column 2 = 36
                                                     Sum of the column 3 = 40
Input 2
                                                     Output 2
                                                     Sum of the row 0 = 250
3 3
                                                     Sum of the row 1 = 107
98 87 65
54 32 21
                                                     Sum of the row 2 = 159
45 56 58
                                                     Sum of the column 0 = 197
                                                     Sum of the column 1 = 175
```

Sum of the column 2 = 144

```
Java (11) 🗸
             int row = scan.nextInt();
             int column = scan.nextInt();
            int r[] = new int[row];
             int c[] = new int[column];
             int a[][] = new int[row][column];
             for(int i=0;i<row;i++){</pre>
10
11 -
                 for(int j=0;j<column;j++){</pre>
12
                      a[i][j] = scan.nextInt();
13
14
15 -
             for(int i=0;i<row;i++){</pre>
                 int sum1=0, sum2=0;
16
                 fon(int i-0.iccolumn.i++){}
```

```
sum1+=a[i][j];
18
                     sum2+=a[j][i];
19
20
21
                 r[i]=sum1;
                 c[i]=sum2;
22
23
             for(int i=0;i<row;i++){</pre>
                 System.out.println("Sum of the row " + i + " = " + r[i]);
25
             for(int i=0;i<row;i++){</pre>
27 -
                 System.out.println("Sum of the column " + i + " = " + c[i]):
28
```

Times submitted: 1 Level: Hard Question type: Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

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Question No: 12 Single File Programming Question

Report Error

Seetha, a maths teacher explained about Matrix addition, subtraction and multiplication in her class. She assigned different task to her students.

She asked Ankit to add two matrix, Banu to subtract two matrix and Janu to multiply two matrix. Ankit, Banu and Janu approached Karthick to complete their task.

Karthick is ready to help all his friends with single program. So he asked his friends to give a square matrix only. Help Karthick to write the program.

Input format

Matrix size in first line -N(Only one value)
NxN elements in next rows for first matrix
NxN elements in next rows for second matrix

Refer Sample Input

Output format

Display result of addition, subtraction and multiplication as shown in sample output

Code constraints

Only Square Matrix

| Input 1 | Output 1 |
|---------|------------|
| 3 | Sum |
| | 4 4 4 |
| 1 2 3 | 4 4 4 |
| 1 2 3 | 4 4 4 |
| 1 2 3 | Difference |
| | -2 0 2 |
| 3 2 1 | -2 0 2 |
| 3 2 1 | -2 0 2 |
| 3 2 1 | Multiply |
| | 18 12 6 |
| | |

```
Java (11)
                        = new int[terms][terms];
             int b[][] = new int[terms][terms];
             int c[][] = new int[terms][terms];
             for(int i=0;i<terms;i++){</pre>
                 for(int j=0;j<terms;j++){</pre>
10 -
                      a[i][j] = scan.nextInt();
11
12
13
             for(int i=0;i<terms;i++){</pre>
14 -
                 for(int j=0;j<terms;j++){</pre>
15 -
                      b[i][j] = scan.nextInt();
17
18
             for(int i=0;i<terms;i++){</pre>
19 -
                 for(int j=0;j<terms;j++){</pre>
                      c[i][j] = b[j][i];
21
22
23
             int sum[][] = new int[terms][terms];
             int diff[][] = new int[terms][terms];
25
             int product[][] = new int[terms][terms];
27 -
             for(int i=0;i<terms;i++){</pre>
                 int s=0, d=0;
28
                 for(int j=0;j<terms;j++){</pre>
29
```

Times submitted: 6 Level: Medium Question type: Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

| Show | testcase sco | res 🗌 | Show | solution |
|------|--------------|-------|------|----------|
| | | | | |

Question No: 13 Single File Programming Question

Report Error

Valid Initial Configuration

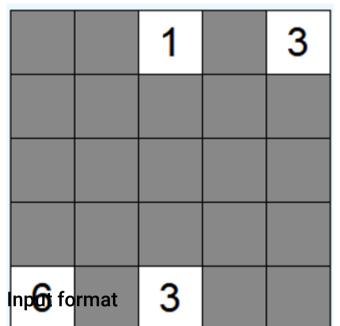
Nurikabe logical game (sometimes called Islands in the Stream) is a binary determination puzzle. The puzzle is played on a typically rectangular grid of cells, some of which contain numbers. You must decide for each cell if it is white or black (by clicking on them) according to the following rules:

- · All of the black cells must be connected.
- · Each numbered cell must be part of a white island of connected white cells.
- · Each island must have the same number of white cells as the number it contains (including the numbered cell).
- Two islands may not be connected.
- There cannot be any 2x2 blocks of black cells.

Unnumbered cells start out grey and cycle through white and black when clicked. Initially numbered cells are white in color.

Problem Statement:

Write a program to check whether the given board configuration is a valid initial configuration. Below figure is the sample valid initial configuration.



First line of the input is an integer N that gives the number of rows and columns of the grid.

Next N lines will have the board configuration with N*N cells. Assume that the maximum number in a cell can be 10. Grey colored cells are represented by the integer 20 in the matrix representation of the input configuration.

Output format

Output "Yes" (without quotes) if the given configuration is a valid initial configuration. Print "No" otherwise (without quotes).

Refer sample input and output for formatting specifications.

| Input 1 | Output 1 |
|--------------|----------|
| 5 | Yes |
| 20 20 1 20 3 | |

```
Java (11) 🗸
        public static void main(String args[]){
            Scanner scan = new Scanner(System.in);
            int terms = scan.nextInt();
            int a[][] = new int[terms][terms];
            for(int i=0;i<terms;i++){</pre>
                 for(int j=0;j<terms;j++){</pre>
                     a[i][j] = scan.nextInt();
10
11
            int flag = 1;
12
            for(int i=0;i<terms;i++){</pre>
13 -
                 for(int j=0;j<terms;j++){</pre>
14 -
                     if(a[i][j]>10 && a[i][j]!=20){
15 -
                         flag=0;
16
                         break;
17
18
```

Times submitted: 1 Level: Easy Question type: Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

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Question No: 14 Single File Programming Question

Report Error

Collisions of Events

Lucarnos Film Festival is an annual film festival and is also known for being a prestigious platform for art house films. This year at the Lucarnos Film festival there are many movies to be screened, each of different genre ranging from drama movies to comedy ones and teen movies to horror ones. The festival is a long-running event this time as the organizers are planning to screen only one movie per day. The organizers have populated their schedule in the form of a matrix where 'i' is the day number and 'j' is the movie number. Eij is the movie preference dates.

You are given a matrix E of N rows and M columns where Eij is 1 if the i-th movie is to be screened on j-th day, otherwise it will be 0. Note that it is not necessary that if a movie x will be screened on day y, then day y should screen only movie x.

You know that if there are two different movies x and y, which are to be screened on the same day z, and then there will be a collision. Can you calculate the number of different collisions at this movie festival? Note that order of movies in the collision doesn't matter.

Input format

The first line of the input contains two space separated integers N, M denoting the number of movies and days, respectively.

Each of the following N lines contain M characters, each of them is either '0' or '1'.

Output format

Output a single line containing an integer corresponding to the number of collisions at the film festival. Refer sample input and output for formatting specifications.

| Input 1 | Output 1 |
|---------|----------|
| 4 3 | 4 |
| 1 1 1 | |
| 1 0 0 | |
| 1 1 0 | |
| 0 0 0 | |
| Input 2 | Output 2 |
| 2 2 | 0 |
| 1 0 | |
| 0 1 | |

```
class Main{
        public static void main(String args[]){
             Scanner scan = new Scanner(System.in);
             int row = scan.nextInt();
             int column = scan.nextInt();
             int a[][] = new int[row][column];
             for(int i=0;i<row;i++){</pre>
                 for(int j=0;j<column;j++){</pre>
                      a[i][i] = scan.nextInt();
10
11
12
13
             int count = 0;
             for(int i=0;i<row;i++){</pre>
14 -
                 for(int j=0;j<column;j++){</pre>
15 -
                      for(int k=i+1;k<row;k++){</pre>
17 -
                          if(a[i][j]==1 && a[k][j]==1){
18
                               count++;
19
21
22
             System.out.println(count);
23
24
25
```

Mark obtained: 10/10 Hints used: 0 **Status:** Correct Times compiled: 2

Times submitted: 1 Level: Hard **Question type:** Single File Programming

Subject: Programming Subject: Java Programming Subject: Arrays

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Welcome Party

New Year is shortly arriving and the students of St. Philip's College of Business are eager to receive the freshers for the coming year. The Welcome party for the freshers is going to be organized in a week's time and in connection to that the College Management has ordered the students to renovate their class room block. The Class room block has N rooms in it numbered from 1 to N. Each room is currently painted in one of the red, blue or green colors. Students are given configuration of colors of their class room block by an array consisting of N values. In this array, color red will be denoted by '1', green by '2' and blue by '3'.

The Management wanted the class room block to be repainted such that each class room has same color. For painting, Students have all the 3 color paints available and mixing any 2 color paints will result into 3rd color paint i.e

- \cdot 1 + 2 = 3
- \cdot 2 + 3 = 1
- $\cdot 3 + 1 = 2$

For example, if a room is already painted in green color, painting that room red color, will make the color of the room blue.

Also, students have many buckets of paint of each color. Simply put, you can assume that they will not run out of paint. Students are a bit lazy, so they does not want to work much and therefore, has asked you to find the minimum number of rooms they have to repaint (possibly zero) in order to have all the rooms with same color as told by the Management. Can you please help them?

Input format

First line of input contains an integer N, denoting the number of class rooms in the College's class room black. Assume that the maximum value for N as 50.

Next line of input contains N values, denoting the current color configuration of rooms.

Output format

Print the minimum number of rooms that need to be painted in order to have all the rooms painted with same color i.e red, blue or green.

| Input 1 | Output 1 |
|------------|----------|
| 3 1 2 1 | 1 |
| | |
| Input 2 | Output 2 |

```
Java (11)
         public static void main(String args[]){
             Scanner scan = new Scanner(System.in);
             int terms = scan.nextInt();
             int a[] = new int[terms];
             int diff[] = new int[terms];
             for(int i=0;i<terms;i++){</pre>
                 a[i] = scan.nextInt();
10
             for(int i=0;i<terms;i++){</pre>
11 -
                 int count=0;
12
                 for(int j=0;j<terms;j++){</pre>
13 -
                      if(a[i]!=a[j]){
14 -
15
                          count++;
```

Times submitted: 1 Level: Easy Question type: Single File Programming

Subject: Programming Subject: Arrays

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