### Display array values

Write a java program to create an array of size 'n' and accepts 'n' number of integers from the user and display all the values from an array

### Sample Input 1 Enter the array size 5 Enter the values 10 15

### Sample Output 1

### Display array values in reverse order

Write a java program to create an array of size 'n' and accepts 'n' number of integers from the user and display all the values from an array in reverse order

# Sample Input 1 Enter the array size 3 Enter the values 46 83 67 Sample Output 1 67 83

### Find & Display the position of a number

Write a java program to find the given number from the array of elements and display its position. If the number is not present in an array then display it as 0.

Assume the position starts from 1.

# Sample Input 1 Enter the array size 4 Enter the values 9 32 17 4 Enter the number to find 17

### Sample Output 1

3

### Sample Input 2

Enter the array size

3

Enter the values

Enter the number to find

Sample Output 2

### Sort the values

Write a java program to sort the values from the array of elements in ascending order

### Sample Input 1 Enter the array size

Enter the values

### Sample Output 1

### Sort the values in descending order

Write a java program to sort the values from the array of elements in descending order

## Sample Input 1 Enter the array size 5 Enter the values 26 10 416 92 7

### Sample Output 1

416

92

26

10

### Find the Player Details

Write a java program to retrieve the player details based on the player id from the array of player objects.

You are provided with the class **Player** with private attributes such as int playerId, String playerName, int age, long phoneNumber with the necessary setters & getters and a four argument constructor.

Include a class PlayerUtility with the method public Player findPlayerDetailsById(Player[] arr, int playerIdToSearch) that accepts an array of player objects and playerId to be searched as an argument. This method should iterate the array of player objects and find the details of the player for the playerId passed as an argument and return the player object. If the playerId is not found then this method should return null.

In the Main class, you are provided with the main method and the details of the player added into the array.

You need to get the playerId to be searched and call the **findPlayerDetailsById** method and display the player details as shown in the sample input and output. If the returned value is null, then this method should display "No player found".

### Sample Input 1

Enter the id to be searched

168

Sample Output 1

Name:Christy

Phone number:9856471230

### Sample Input 2

Enter the id to be searched

1059

### Sample Output 2

### Pass and Fail Count

Ram has passed in certain subjects and failed in a few. Write a program to count the no of subjects he passed in and the no of subjects he has failed in. Marks scored below 50 is considered as failed. If Ram has passed in all the subjects print "Ram passed in all subjects" and if failed print "Ram failed in all subjects".

Assume maximum size of array is 20,

```
Sample Input 1:
Enter the no of subjects:
60
70
80
90
45
49
Sample Output 1:
Ram passed in 4 subjects and failed in 2 subjects
Sample Input 2:
Enter the no of subjects:
0
Sample Output 2:
Invalid input range
Sample Input 3:
Enter the no of subjects:
-2
Sample Output 3:
Invalid input range
```

### Search a Course

IIHT institution is offering a variety of courses to students. Students have a facility to check whether a particular course is available in the institution. Write a program to help the institution accomplish this task. If the number is less than or equal to zero display "Invalid Range".

Assume maximum number of courses is 20.

```
Sample Input 1:
Enter no of course:
Enter course names:
Tava
Oracle
C++
Mysql
Dotnet
Enter the course to be searched:
C++
Sample Output 1:
C++ course is available
Sample Input 2:
Enter no of course:
Enter course names:
Java
Oracle
Dotnet
Enter the course to be searched:
C++
Sample Output 2:
C++ course is not available
Sample Input 3:
Enter no of course:
Sample Output 3:
Invalid Range
```

### Sum of the maximum and the minimum element

Anjali gets n numbers in an array. Write a Java program to print the sum of the maximum and the minimum element in the array. If the size of an array is 0 or less print "Invalid Array Size".

### Sample Input 1: Enter the size of an array: 5 Enter the elements: 45 23 48 90 89 Sample Output 1: 113 Sample Input 2: Enter the size of an array: 0 Sample Output 2: Invalid Array Size

### Cumulative sum in an array

Raghavi wants to write Java program to find the cumulative sum of the array with a given set of values. Input consist of integers . If the size of an array is zero or lesser then display the message as "Invalid Range". Print the output in the format which is provided in sample output .

Assume maximum size of array is 20,

```
Sample Input 1:
Enter the number of elements
5
Enter the elements
3
5
7
Sample Output 1:
2 5 10 17 18
Sample Input 2:
Enter the number of elements
5
Enter the elements
2
3
-5
7
1
Sample Output 2:
2 5 0 7 8
```

### Sample Input 3:

Enter the number of elements

0

### Sample Output 3: Invalid Range

### Array Compatiblilty

Two arrays are said to be compatible if they are of the same size and if the ith element in the first array is greater than or equal to the ith element in the second array for all i elements. If the array size is zero or lesser then display the message "Invalid array size". Write a Java program to find whether 2 arrays are compatible or not. If the arrays are compatible display the message as "Arrays are Not Compatible".

```
Sample Input 1:
Enter the size for First array:
5
Enter the elements for First array:
5
14
17
19
15
Enter the size for Second array:
5
Enter the elements for Second array:
2
5
9
15
7
Sample Output 1:
Arrays are Compatible
```

```
Sample Input 2:
Enter the size for First array:
3
Enter the elements for First array:
1
4
7
Enter the size for Second array:
5
Enter the elements for Second array:
2
5
9
5
7
Sample Output 2:
Arrays are Not Compatible
Sample Input 3:
Enter the size for First array:
-2
Sample Output 3:
Invalid array size
```

### Sort the first and second half of an array

Anjali likes to play mathematical tricky games .She gets n numbers for an array. Help Anjali to write a Java program to sort the first half of the array in ascending order and the second half of the array in descending order. If the size of the array is 0 or lesser then display the message as "Array size should be greater than 0".

### Sample Input 1: Enter the size of an array: 5 Enter the elements: 89 23 56 12 Sample Output 1: 23 56 89 99 12 Sample Input 2: Enter the size of an array: 0 Sample Output 2: Array size should be greater than 0

### Highest Mark in Each Semester

Ram wants to know the maximum marks scored by him in each semester. The mark should be between 0 to 100 ,if goes beyond the range display "You have entered invalid mark."

### Sample Input 1: Enter no of semester: 3 Enter no of subjects in 1 semester: 3 Enter no of subjects in 2 semester: Enter no of subjects in 3 semester: 2 Marks obtained in semester 1: 50 60 70 Marks obtained in semester 2: 90 98 76 67 Marks obtained in semester 3: 89

```
Sample Output 1:
Maximum mark in 1 semester:70
Maximum mark in 2 semester:98
Maximum mark in 3 semester:89
Sample Input 2:
Enter no of semester:
Enter no of subjects in 1 semester:
3
Enter no of subjects in 2 semester:
Enter no of subjects in 3 semester:
2
Marks obtained in semester 1:
55
67
98
Marks obtained in semester 2:
67
-98
```

### Sample Output 2:

You have entered invalid mark.

### Sum of factorial of positive and single digit numbers in an array

Write a java program to find the sum of factorial of the numbers in an array. Consider the number for finding the factorial only if it is positive and single digit. If not print "No positive and single digit numbers found in an array".

Example if the array is {2,-7,14,-24,41,5} the output should be 122

# Sample Input 1: Enter the size of an array: Enter the elements: 2 -56 -13 6 56 Sample Output 1: