

# Lab Assignment 01



Inspiring Excellence

Course Code:	CSE111
Course Title:	Programming Language II
Topic:	Loops, String, Arrays, OOP Basics
Number of Tasks:	10 [Classwork: 5, Homework: 5]

**Lab Policy:** [Lab Policy Student Version - Summer 2025 Onward](#)  
**Must Submit the Lab Agreement Form:** [Form Link](#)

## CLASSWORK

### Task 1

Write a Java program that takes 10 inputs from the user in a loop, and displays the sum, average, minimum and maximum of **Only the positive odd numbers** from those numbers. If no such numbers are found, then display the message “No odd positive numbers found”.

Sample Input	Sample Output
1 4 2 9 2 -4 3 -1 0 1	Sum = 14 Minimum = 1 Maximum = 9 Average = 3.5
34 -11 50 24 -24 2 -4 0 8 12	No odd positive numbers found
23 2 -4 0 8 12 34 -11 53 21	Sum = 97 Minimum = 21 Maximum = 53 Average = 32.333333333333336

## **Task 2**

Write a Java program that takes TWO string inputs (containing exactly one word in each string) from the user. Concatenate those two strings with a single space in between them. Generate a number **which is the sum of all the letters in that concatenated string** where A = 65, Z = 90, a = 97, and z = 122. Your task is to print that concatenated string and the number generated from that string.

Sample Input	Output
Hello123 Wo%%rld	Hello123 Wo%%rld 1020
Ja12-va CHOWD+ HURY	Ja12-va CHOWD+ HURY 1087

## **Task 3**

Write a Java program that asks the user the length of an array (N) then takes N number of doubles as elements for the array as input. First, remove the consecutive duplicate elements from the original array **to form a new array**. Then print the number of elements removed from the original array.

Sample Input	Sample Output
N = 8 Please enter the elements of the array: 5.2 2.7 1.0 1.0 2.7 3.5 3.5 3.5	New Array: 5.2 2.7 1.0 2.7 3.5 Removed elements : 3

### Task 4

Design the “**Student**” class so that the main method prints the following:

Tester Class	Output
<pre>public class StudentTester{     public static void main(String [] args){         Student s1 = new Student();         System.out.println("Name of the Student: "+s1.name);         System.out.println("ID of the Student: "+s1.id);         s1.name = "Bob";         s1.id = 123;         System.out.println("Name of the Student: "+s1.name);         System.out.println("ID of the Student: "+s1.id);     } }</pre>	<pre>Name of the Student: Default ID of the Student: 0 Name of the Student: Bob ID of the Student: 123</pre>

## Task 5

Consider the following class:

```
public class Human{
    public int age;
    public double height;
}
```

**Show the output of the following sequence of statements:**

[illegible]

For this course, we'll be using **DrJava** as IDE for Java Coding:

[Link to JDK and DrJava](#)

**Drjava Installation Guide:**

<https://www.youtube.com/watch?v=Gss9sL3Q-8s>

## **HOMEWORK**

### **Task 1**

Write a java program that takes 2 integer numbers as input and calculates how many prime numbers exist between them.

<b>Sample Input</b>	<b>Sample Output</b>
10 15	There are 2 prime numbers between 10 and 15.
150 100	There are 10 prime numbers between 100 and 150.

### **Task 2**

Write a Java program that takes a string input in small letters from the user and prints the previous alphabet in sequence for each alphabet found in the input.

<b>Sample Input</b>	<b>Output</b>
wxyz	vwxxy
thecow	sgdbnv
abcd	zabc

### **Task 3**

Write a Java program that will take an integer number N from the user and create an integer array by taking N numbers from the user. Print how many times each number appears in the array.

<b>Sample Input</b>	<b>Sample Output</b>
N = 5 6	6 - 2 times 15 - 2 times

15 14 15 6	14 - 1 times
N = 6 -5 10 14 10 -7 10	-5 - 1 times 10 - 3 times 14 - 1 times -7 - 1 times

#### **Task 4**

Design the **CSECourse** class to generate the correct output from the driver code provided below:

Driver Code	Output
<pre> public class CourseTester{     public static void main(String args []){         CSECourse c1 = new CSECourse();         System.out.println("Course Name: "+c1.courseName);         System.out.println("Course Code: "+c1.courseCode);         System.out.println("Credit: "+c1.credit);     } } </pre>	<p>Course Name: Programming Language II Course Code: CSE111 Credit: 3</p>



## Task 5

Consider the following class:

```
public class Student{
    public String name;
    public double cgpa;
}
```

**Show the output of the following sequence of statements:**

[illegible]

## Ungraded Tasks (Optional)

(You don't have to submit the ungraded tasks)

### Task 1

Write a Java program that will take an integer number N from the user and create an integer array by taking N numbers from the user. Then take another number from the user and create a new array by removing that number from the input array. Finally, print the new array.

Sample Input	Sample Output
N = 5 23 100 0 56 -34 Remove Element = 100	Input array: 23 100 0 56 -34 New array: 23 0 56 -34
N = 4 -5 10 2 -7 Remove Element = 43	Input array: -5 10 2 -7 Element not found

### Task 2

Write a program that reads 5 numbers into an array and prints the smallest and largest number and their location in the array.

Sample Input	Sample Output
7 13 2 10 6	The largest number 13 was found at location 1. The smallest number 2 was found at location 2.

2 4 -5 12 3	The largest number 12 was found at location 3. The smallest number -5 was found at location 2.
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### **Task 3**

Write a program that asks the user how many numbers to take. Then, it takes that many numbers in an array and prints the median value.

[How to Find the Median Value: <http://www.mathsisfun.com/median.html>]

Sample Input	Sample Output
5 10 50 40 20 30	The median is 30.  <b>Explanation:</b> 30 falls in middle 10, 20, 30, 40, 50
4 30 10 40 20	The median is 25.  <b>Explanation:</b> $(20+30)/2=25$ (average of two middle values from 10, 20, 30, 40).

### **Task 4**

Write a Java program that asks the user for the length of an array and then creates an integer array of that length by taking inputs from the user. Then, reverse the **original array without** creating any new array and print it. **[In-place reverse]**

Sample Input	Sample Output
Enter the length of the array: 5 7 -31	100 97 344 -31 7

344 97 100	
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### **Task 5**

Design the **Player** class with the necessary properties so that the given Driver code produces the expected output.

Driver Code	Output
<pre> public class PlayerTester{     public static void main(String args[]){         Player player1 = new Player();         player1.name = "Ronaldo";         player1.jersey_number = 9;         player1.position = "Striker";         System.out.println("Name of the Player: "+ player1.name);         System.out.println("Jersey Number of player: "+ player1.jersey_number);         System.out.println("Position of player: "+ player1.position);         System.out.println("=====");         Player player2 = new Player();         player2.name = "Neuer";         player2.jersey_number = 1;         player2.position = "Goal Keeper";         System.out.println("Name of the player: "+ player2.name);         System.out.println("Jersey Number of player: "+ player2.jersey_number);         System.out.println("Position of player: "+ player2.position);     } } </pre>	<pre> Name of the Player: Ronaldo Jersey Number of player: 9 Position of player: Striker ===== Name of the player: Neuer Jersey Number of player: 1 Position of player: Goal Keeper </pre>