



### Lab 1

1. Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers , takes two numbers as input

Test Data:

Input first number: 125

Input second number: 24

Expected Output :

$125 + 24 = 149$

$125 - 24 = 101$

$125 \times 24 = 3000$

$125 / 24 = 5$

$125 \bmod 24 = 5$

2. Write a Java program that takes a number as input and prints its multiplication table up to 10.

Test Data:

Input a number: 8

Expected Output :

$8 \times 1 = 8$

$8 \times 2 = 16$

$8 \times 3 = 24$

...

$8 \times 10 = 80$

3. Write a Java program to print the area and perimeter of a circle.

*Test Data:*

Radius = 7.5

Expected Output

Perimeter is = 47.12388980384689

Area is = 176.71458676442586

4. Java program to find out the average of a set of integers

Enter the count of numbers:

5

Enter an integer:

3

Enter an integer:

8

Enter an integer:

6

Enter an integer:

7

Enter an integer:

2

The average is: 5.2

5. Write a Java program to calculate the sum of two integers and return true if the sum is equal to a third integer.

Sample Output:

Input the first number : 5  
Input the second number: 10  
Input the third number : 15  
The result is: true

6. Write a Java program to reverse a word.

Sample Output:

Input a word: dsaf  
Reverse word: fasd

7 - Java program to check whether the given number is even or odd

Enter a number:

33

The number is Odd

Enter a number:

24

The number is Even

8 - Java program to convert the temperature in Centigrade to Fahrenheit

Enter temperature in Centigrade:

43

Temperature in Fahrenheit is: 109.4

9. Write a Java program that takes a string and a number from the user, then prints the character in the given index.

Test Data:

Input a string: Java Bootcamp

Input a number: 1

Expected Output:

a

10. Write a Java program to print the area and perimeter of a rectangle.

Test Data:

Width = 5.5 Height = 8.5

Expected Output

Area is  $5.6 * 8.5 = 47.60$

Perimeter is  $2 * (5.6 + 8.5) = 28.20$

11. Write a Java program to compare two numbers.

Input Data:

Input first integer: 25

Input second integer: 39

Expected Output

$25 \neq 39$

$25 < 39$

$25 \leq 39$

12. Write a Java program to convert seconds to hours, minutes and seconds.

Sample Output:

Input seconds: 86399

23:59:59

13. Write a Java program that accepts four integers from the user and prints equal if all four are equal, and not equal otherwise.

Sample Output:

Input first number: 25

Input second number: 37

Input third number: 45

Input fourth number: 23

Numbers are not equal!

14. Write a Java program that reads an integer and check whether it is negative, zero, or positive.

Test Data

Input a number: 7

Expected Output :

Number is positive

15. Write a program to enter the numbers till the user wants and at the end it should display the count of positive, negative and zeros entered

(End loop use -1 , Don't count -1).

Test data

1

3

0

-2

-4

-1

2 positives

1 zero

2 negatives

16 - Write a program that prompts the user to input an integer and then outputs the number with the digits reversed.

For example, if the input is 12345, the output should be 54321.

17 - Write a program to enter the numbers till the user wants and at the end the program should display the largest and smallest numbers entered.

enter the number : 4

enter the number : 5

enter the number : -1

enter the number : 9

the large number : 9

the small number : -1

18 - Determine and print the number of times the character 'a' appears in the input entered by the user.

Enter String:

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Output: Number of a's: 3