

**EAST WEST UNIVERSITY****Department of Computer Science and Engineering****B.Sc. in Computer Science and Engineering Program****Lab 2, Spring 2020 Semester**

Course: CSE 110 Object Oriented Programming, Section-2,3
Instructor: Mahamudul Hasan, Lecturer, CSE Department
Full Marks: TBA
Time: 3 Hours

1.	Write a Java program to print 'Hello' on screen and then print your name on a separate line. Expected Output: Hello Donald Trump
2.	Write a Java program to print the sum of two numbers. Test Data: 74 + 36 Expected Output: 110
3.	Write a Java program to divide two numbers and print on the screen. Test Data: 50/3 Expected Output: 16
4.	Write a Java program to print the result of the following operations. Test Data: a. $-5 + 8 * 6$ b. $(55+9) \% 9$ c. $20 + -3*5 / 8$ d. $5 + 15 / 3 * 2 - 8 \% 3$ Expected Output: 43 1 19 13
5.	Write a Java program that takes two numbers as input and display the product of two numbers. Test Data: Input first number: 25 Input second number: 5 Expected Output: 25 x 5 = 125

6.	<p>Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.</p> <p>Test Data:</p> <p>Input first number: 125</p> <p>Input second number: 24</p> <p>Expected Output:</p> <p>$125 + 24 = 149$</p> <p>$125 - 24 = 101$</p> <p>$125 \times 24 = 3000$</p> <p>$125 / 24 = 5$</p>
7.	<p>Write a Java program that takes a number as input and prints its multiplication table upto 10.</p> <p>Test Data:</p> <p>Input a number: 8</p> <p>Expected Output:</p> <p>$8 \times 1 = 8$</p> <p>$8 \times 2 = 16$</p> <p>$8 \times 3 = 24$</p> <p>$8 \times 10 = 80$</p>
8.	<p>Write a Java program to compute the specified expressions and print the output.</p> <p>Test Data:</p> <p>$((25.5 * 3.5 - 3.5 * 3.5) / (40.5 - 4.5))$</p> <p>Expected Output</p> <p>2.138888888888889</p>
9.	<p>Write a Java program to compute a specified formula.</p> <p>Specified Formula:</p> <p>$4.0 * (1 - (1.0/3) + (1.0/5) - (1.0/7) + (1.0/9) - (1.0/11))$</p> <p>Expected Output</p> <p>2.9760461760461765</p>
10.	<p>Write a Java program to print the area and perimeter of a circle.</p> <p>Test Data:</p> <p>Radius = 7.5</p> <p>Expected Output</p> <p>Perimeter is = 47.12388980384689</p> <p>Area is = 176.71458676442586</p>
11.	<p>Write a Java program that takes three numbers as input to calculate and print the average of the numbers.</p>
12.	<p>Write a Java program to print the area and perimeter of a rectangle.</p> <p>Test Data:</p> <p>Width = 5.5 Height = 8.5</p> <p>Expected Output</p> <p>Area is $5.6 * 8.5 = 47.60$</p> <p>Perimeter is $2 * (5.6 + 8.5) = 28.20$</p>
13.	<p>Write a Java program to swap two variables.</p>

14.	<p>Write a Java program to compare two numbers.</p> <p>Input Data:</p> <p>Input first integer: 25</p> <p>Input second integer: 39</p> <p>Expected Output</p> <p>25 != 39</p> <p>25 < 39</p> <p>25 <= 39</p>
15.	<p>Write a Java program and compute the sum of the digits of an integer.</p> <p>Input Data:</p> <p>Input an integer: 25</p> <p>Expected Output</p> <p>The sum of the digits is: 7</p>
16.	<p>Write a Java program to print the odd numbers from 1 to 99. Prints one number per line.</p> <p>Sample Output:</p> <p>1</p> <p>3</p> <p>5</p> <p>....</p> <p>97</p> <p>99</p>
17.	<p>Write a Java program to accept a number and check the number is even or not. Prints 1 if the number is even or 0 if the number is odd.</p> <p>Sample Output:</p> <p>Input a number: 20</p> <p>1</p>
18.	<p>Write a Java program to calculate the sum of two integers and return true if the sum is equal to a third integer.</p> <p>Sample Output:</p> <p>Input the first number : 5</p> <p>Input the second number: 10</p> <p>Input the third number : 15</p> <p>The result is: true</p>
19.	<p>Write a Java program that accepts three integer values and return true if one of them is 20 or more and less than the subtractions of others.</p> <p>Sample Output:</p> <p>Input the first number: 15</p> <p>Input the second number: 20</p> <p>Input the third number: 25</p> <p>false</p>
20.	<p>Write a Java program that accepts two integer values between 25 to 75 and return true if there is a common digit in both numbers.</p> <p>Sample Output:</p> <p>Input the first number : 35</p> <p>Input the second number: 45</p> <p>Result: true</p>
21.	<p>Write a Java program to compute the sum of the first 100 prime numbers.</p> <p>Sample Output:</p> <p>Sum of the first 100 prime numbers: 24133</p>