

Topics for Lab Report

1. Java Output / Print
2. Java Variables: String, int, float, char, Boolean
3. Problem: Calculate the Area of a Rectangle
4. Arithmetic Operators
 - Arithmetic operators
 - Assignment operators
 - Comparison operators
 - Logical operators
 - Bitwise operators
5. Java String Methods : <https://drive.google.com/file/d/1M4JCwsuQEiVk92U4x199oeI3wcFiurcV/view>
6. Java Math
7. Java Conditions Statements:
 - if, else, else if
 - switch-case
8. Java Loop:
 - For-Loop
 - While Loop
 - Do-While Loop
9. Java Break and Continue
10. Java Array: 1D Array, 2D Array
11. Java User Input (Scanner): nextLine(), nextBoolean(), nextByte(), nextDouble(), nextFloat(), nextInt(), nextLong(), nextShort()
12. Java Methods
 - Method with no arguments and no return value
 - Method with arguments but no return value
 - Method with no arguments but with return value
 - Method with arguments and return value.
13. Java Method Overloading
14. Problem Solving with User Input:
 - Check Leap Year
 - BMI Calculator
 - Calculate the Area of Triangle
 - Calculate Factorial
 - Counting Vowels in a String
 - Prime Factorization
 - Reverse a Number
 - Fibonacci Series
 - Sum of Natural Numbers (1 to 100)
15. Java Constructors & Constructor Overloading
16. Encapsulation in Java
17. Inheritance and Polymorphism in Java
18. Abstraction in Java
19. Java ArrayList