

# Java Basics Assignments for Students

## 1. Hello World

- Write a Java program that prints "Hello, World!" to the console.

## 2. Simple Calculator

- Prompt the user to input two numbers and an operator (+, -, \*, /).
- Perform the selected operation and print the result.

## 3. Odd or Even

- Input an integer and determine whether it is odd or even.

## 4. Leap Year Checker

- Ask the user to enter a year and check whether it is a leap year.

## 5. Grade Calculator

- Input marks for 5 subjects and calculate the average.
- Assign grades based on average (A, B, C, etc.).

## 6. Multiplication Table

- Print the multiplication table of a given number using a loop.

## 7. Factorial of a Number

- Input a number and compute its factorial using a loop.

## 8. Fibonacci Series

- Print the first N numbers of the Fibonacci sequence.

## 9. Number Guessing Game

- Generate a random number and let the user guess it in a loop until correct.

## 10. Array Operations

- Create an array of integers.
- Find the maximum, minimum, and average.

- Sort the array in ascending order.

#### 11. Palindrome Checker

- Check if a given string or number is a palindrome.

#### 12. Simple Bank Account Class

- Create a `BankAccount` class with methods to deposit, withdraw, and check balance.

#### 13. Student Class

- Create a class `Student` with properties like name, roll number, and grade.
- Create an array of students and display their information.

#### 14. Prime Number Checker

- Input a number and determine if it is prime.

#### 15. Reverse a String

- Input a string and print its reverse.