Getting Started with Java Programming (For Beginners)

1. Setting up

- Install **Java (JDK)** on your computer. (Ask teacher if already installed.)
- Install **BlueJ** or any editor like **Notepad / VS Code / IntelliJ**. (We'll use **BlueJ** for beginners.)

2. First Java Program Steps

1. Open **BlueJ**.
2. Create a **new project** → give it a name, like *MyFirstProgram*.
3. Inside it, create a **new class** → name it `FirstProgram`.
4. Delete everything inside and write this:

```
public class FirstProgram {
    public static void main(String[] args) {
        System.out.println("Hello, Java!");
    }
}
```

3. How to Run

- Click **Compile** button.
- Right-click the class → select **void main(String[] args)** → click **OK**.
- You will see the output:

```
Hello, Java!
```

☞ That's your **first Java program** 🎉

📓 20 Very Simple Java Programs for Practice

Each program introduces **one new concept**. Students should type them one by one, run, and note the output.

Program 1: Print Your Name

```
public class PrintName {
    public static void main(String[] args) {
        System.out.println("My name is Rahul");
    }
}
```

Program 2: Print Bio-Data

```
public class BioData {
    public static void main(String[] args) {
        System.out.println("Name: Rahul Sharma");
        System.out.println("Father's Name: Mr. Sharma");
        System.out.println("Class: 9");
        System.out.println("School: ABC School");
    }
}
```

Program 3: Add Two Numbers

```
public class AddNumbers {
    public static void main(String[] args) {
        int a = 5, b = 7;
```

```
        int sum = a + b;
        System.out.println("Sum = " + sum);
    }
}
```

Program 4: Subtract Two Numbers

```
public class SubtractNumbers {
    public static void main(String[] args) {
        int a = 15, b = 8;
        int result = a - b;
        System.out.println("Difference = " + result);
    }
}
```

Program 5: Multiply Two Numbers

```
public class MultiplyNumbers {
    public static void main(String[] args) {
        int a = 4, b = 6;
        int product = a * b;
        System.out.println("Product = " + product);
    }
}
```

Program 6: Divide Two Numbers

```
public class DivideNumbers {
    public static void main(String[] args) {
        int a = 20, b = 4;
        int result = a / b;
        System.out.println("Quotient = " + result);
    }
}
```

Program 7: Remainder of Division

```
public class Remainder {
    public static void main(String[] args) {
        int a = 20, b = 3;
        int result = a % b;
        System.out.println("Remainder = " + result);
    }
}
```

Program 8: Double a Number

```
public class DoubleNumber {
    public static void main(String[] args) {
        int n = 15;
        System.out.println("Double = " + (2 * n));
    }
}
```

Program 9: Square of a Number

```
public class SquareNumber {
    public static void main(String[] args) {
        int n = 6;
        System.out.println("Square = " + (n * n));
    }
}
```

Program 10: Cube of a Number

```
public class CubeNumber {
    public static void main(String[] args) {
        int n = 3;
        System.out.println("Cube = " + (n * n * n));
    }
}
```

Program 11: Swap Two Numbers

```
public class SwapNumbers {
    public static void main(String[] args) {
        int a = 10, b = 20;
        System.out.println("Before Swap: a=" + a + ", b=" + b);
        int temp = a;
        a = b;
        b = temp;
        System.out.println("After Swap: a=" + a + ", b=" + b);
    }
}
```

Program 12: Area of Rectangle

```
public class AreaRectangle {
    public static void main(String[] args) {
        int length = 5, width = 3;
        int area = length * width;
        System.out.println("Area = " + area);
    }
}
```

Program 13: Area of Square

```
public class AreaSquare {
    public static void main(String[] args) {
        int side = 4;
        int area = side * side;
        System.out.println("Area = " + area);
    }
}
```

Program 14: Area of Circle

```
public class AreaCircle {
    public static void main(String[] args) {
        double radius = 7;
        double area = 3.14 * radius * radius;
        System.out.println("Area = " + area);
    }
}
```

Program 15: Perimeter of Rectangle

```
public class PerimeterRectangle {
    public static void main(String[] args) {
        int l = 6, w = 4;
        int perimeter = 2 * (l + w);
        System.out.println("Perimeter = " + perimeter);
    }
}
```

Program 16: Perimeter of Square

```
public class PerimeterSquare {
```

```
    public static void main(String[] args) {
        int side = 5;
        int perimeter = 4 * side;
        System.out.println("Perimeter = " + perimeter);
    }
}
```

Program 17: Simple Interest

```
public class SimpleInterest {
    public static void main(String[] args) {
        int p = 1000, r = 5, t = 2;
        int si = (p * r * t) / 100;
        System.out.println("Simple Interest = " + si);
    }
}
```

Program 18: Average of Three Numbers

```
public class AverageThree {
    public static void main(String[] args) {
        int a = 10, b = 20, c = 30;
        int avg = (a + b + c) / 3;
        System.out.println("Average = " + avg);
    }
}
```

Program 19: Largest of Two Numbers

```
public class LargestTwo {
    public static void main(String[] args) {
        int a = 15, b = 25;
        if(a > b)
            System.out.println("Largest = " + a);
        else
            System.out.println("Largest = " + b);
    }
}
```

Program 20: Check Even or Odd

```
public class EvenOdd {
    public static void main(String[] args) {
        int n = 7;
        if(n % 2 == 0)
            System.out.println(n + " is Even");
        else
            System.out.println(n + " is Odd");
    }
}
```

✓ **Teaching Tip for Slow Learners**

- Let them **type by hand** (not just copy-paste).
- After each program, **ask them to change numbers/values** and run again.
- Show **output on board** → then ask them to predict before running.
- Encourage them: *"Even if the program is small, it's a success."*