**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."*