**Java Learning Plan with Programs**

**🖥️ Before You Begin**

1. Install **BlueJ** (or any Java IDE).
2. Create a **new project** (Example: MyPrograms).
3. Inside, create a **new class** → delete everything inside → write your program.
4. Click **Compile** → Right-click class → void main(String[] args) → **OK** → See output.  
   👉 Don’t worry if you get errors. Errors = learning.

**📅 Week 1 – First Programs**

**🔹 Program 1: Print Hello Java**

public class HelloJava {

public static void main(String[] args) {

System.out.println("Hello, Java!");

}

}

📌 Instruction: Always start with this program. It checks your setup is working.

**🔹 Program 2: Print Your Name**

public class PrintName {

public static void main(String[] args) {

System.out.println("My name is Rahul");

}

}

📌 Instruction: Change “Rahul” to your own name.

**🔹 Program 3: 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");

}

}

📌 Instruction: Replace details with **your own**.

**📅 Week 2 – Arithmetic Basics**

**🔹 Program 4: 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);

}

}

📌 Instruction: Change values of a and b.

**🔹 Program 5: Subtract 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 6: Multiply 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 7: Divide 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 8: Find Remainder**

public class Remainder {

public static void main(String[] args) {

int a = 20, b = 3;

int result = a % b;

System.out.println("Remainder = " + result);

}

}

**📅 Week 3 – Working with Numbers**

**🔹 Program 9: Double a Number**

public class DoubleNumber {

public static void main(String[] args) {

int n = 15;

System.out.println("Double = " + (2 \* n));

}

}

**🔹 Program 10: Square a Number**

public class SquareNumber {

public static void main(String[] args) {

int n = 6;

System.out.println("Square = " + (n \* n));

}

}

**🔹 Program 11: Cube a Number**

public class CubeNumber {

public static void main(String[] args) {

int n = 3;

System.out.println("Cube = " + (n \* n \* n));

}

}

**🔹 Program 12: 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);

}

}

📌 Instruction: Try swapping your own values.

**📅 Week 4 – Area and Perimeter**

**🔹 Program 13: 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 14: 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 15: 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 16: 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 17: Perimeter of Square**

public class PerimeterSquare {

public static void main(String[] args) {

int side = 5;

int perimeter = 4 \* side;

System.out.println("Perimeter = " + perimeter);

}

}

**📅 Week 5 – Simple Applications**

**🔹 Program 18: 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 19: 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);

}

}

**📅 Week 6 – Using Conditions**

**🔹 Program 20: 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 21: 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");

}

}

**✅ Student Checklist**

* Type each program **by hand**.
* Change the values and **see new outputs**.
* **Write the program in your notebook** before typing.
* If you get error → don’t panic → check spelling, brackets { }, semicolon ;.
* Revise all programs on **Friday without looking**.