**1. Variables & Data Types**

class VariablesDemo {

public static void main(String[] args) {

int age = 20;

double salary = 55000.50;

char grade = 'A';

boolean isStudent = true;

System.out.println("Age: " + age + ", Salary: " + salary + ", Grade: " + grade + ", Student: " + isStudent);

}

}

**2. Operators**

class OperatorsDemo {

public static void main(String[] args) {

int a = 10, b = 3;

System.out.println("Addition: " + (a+b));

System.out.println("Division: " + (a/b));

System.out.println("Modulo: " + (a%b));

}

}

**3. Conditional Statements**

class IfElseDemo {

public static void main(String[] args) {

int marks = 75;

if(marks >= 50) {

System.out.println("Pass");

} else {

System.out.println("Fail");

}

}

}

**4. Loops**

class LoopDemo {

public static void main(String[] args) {

for(int i = 1; i <= 5; i++) {

System.out.println("Number: " + i);

}

}

}

**5. Arrays**

class ArrayDemo {

public static void main(String[] args) {

int[] numbers = {10, 20, 30, 40};

for(int num : numbers) {

System.out.println(num);

}

}

}

**6. Methods**

class MethodDemo {

static int square(int x) {

return x \* x;

}

public static void main(String[] args) {

System.out.println("Square of 5: " + square(5));

}

}

**7. Classes & Objects**

class Car {

String brand;

int year;

Car(String b, int y) {

brand = b;

year = y;

}

void display() {

System.out.println(brand + " - " + year);

}

public static void main(String[] args) {

Car c1 = new Car("Tesla", 2023);

c1.display();

}

}

**8.Collections (ArrayList)**

import java.util.\*;

class ArrayListDemo {

public static void main(String[] args) {

ArrayList<String> list = new ArrayList<>();

list.add("Apple");

list.add("Banana");

list.add("Mango");

System.out.println(list);

}

}