

S.No.	Topics	Practice
WEEK 1		
1	Install Java + IDE, Basic Structure (class, main)	Print your name & age
2	Variables, Data Types, Operators	Add, subtract, multiply two numbers
3	Input with Scanner, Type Casting	Simple interest calculator
4	If-else, Nested If	Find largest of 3 numbers
5	Switch statement	Calculator using switch
6	Loops (for, while, do-while)	Print table of a number
WEEK 2		
7	Methods (with/without return)	Sum of two numbers using method
8	Method Overloading	Area calculator (circle, square)
9	Arrays 1D	Find max & min element
10	Arrays 2D	Matrix addition
11	Enhanced for loop	Reverse an array
12	Strings (concat, length, compare)	Palindrome string
WEEK 3		
13	Classes & Objects	Create Student class
14	Constructors (default, parameterized)	BankAccount class
15	this keyword	Differentiate variable & parameter
16	Access Modifiers	Secure Student data
17	static keyword	Static counter for objects
18	Inheritance (extends)	Vehicle → Car
WEEK 4		
19	Method Overriding	Animal → Dog sound
20	super keyword	Call parent constructor
21	Polymorphism	Shape area (Circle, Rectangle)
22	Abstraction (abstract class)	Employee payroll
23	Interface	Multiple payment methods
24	Encapsulation	Secure password storage
WEEK 5		
25	try, catch, finally	Divide by zero handling
26	Multiple catch blocks	Array index exception
27	throw & throws	Custom exception for age
28	Custom exceptions	Bank balance exception
29	ArrayList	Add, remove, search elements
30	LinkedList	Reverse linked list
WEEK 6		
31	HashSet	Remove duplicates
32	HashMap	Student ID → Name mapping
33	Iterator & for-each loop	Iterate & display collection
34	Sorting with Collections.sort()	Sort names alphabetically
35	Reading file (FileReader, BufferedReader)	Display file content
36	Writing to file (FileWriter, BufferedWriter)	Save user input to file
WEEK 7		
37	Serialization	Save object to file
38	Deserialization	Load object from file
39	CRUD Operations	Insert, update, delete