

S.No.	Topics	Practice
<b>WEEK 1</b>		
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
<b>WEEK 2</b>		
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
<b>WEEK 3</b>		
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
<b>WEEK 4</b>		
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
<b>WEEK 5</b>		
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
<b>WEEK 6</b>		
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
<b>WEEK 7</b>		
37	Serialization	Save object to file
38	Deserialization	Load object from file
39	CRUD Operations	Insert, update, delete