JAVA Programming

Course Code	23SO8553	Year	III	Semester	I
Course Category	SOC	Branch	ECE	Course Type	Practical
Credits	2	L-T-P	1-0-2	Prerequisites	Programming With C
Continuous Internal Evaluation:	30	Semester End Evaluation:	70	Total Marks:	100

Course Outcomes		
Upon successful completion of the course, the student will be able to		BL
CO1	Apply object oriented principles/ Java constructs for solving problems.	L3
CO2	Implement programs as an individual on different IDE/ online platforms.	L3
CO3	Develop an effective report based on various programs implemented	L3
CO4	Apply technical knowledge for a given problem and express with an Effective oral communication.	L3
CO5	Analyze outputs using given constraints/test cases.	L4

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of Correlations (3:High, 2:Medium, 1:Low)													
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2
CO1	3				3			1			1	1	
CO2	3				3			1			1	1	
CO3							1	1	3		1		
CO4							1	1	3		1		
CO5	3	3			3			1			1	1	
Average	3	3			3		1	1	3		1	1	

Syllabus		
Expt. No.	Contents	Mapped CO
1	Implement Java Programs by using Conditional Statements, Switch and loops with suitable examples	CO1-CO5
2	Develop Java Programs Using 1D Arrays and 2D arrays	CO1-CO5
3	Use String, String Buffer and String Tokenizer classes to develop Java programs	CO1-CO5
4	Implement the concept of static variables, static methods and static block	CO1-CO5
5	Implement the concept of instantiation of objects using Classes	CO1-CO5
6	Implement reusability concept through inheritance	CO1-CO5
7	Implement concept of Polymorphism using method: Overloading and overriding	CO1-CO5
8	Develop Java programs using Abstract Class to achieve Partial	CO1-CO5

	abstraction	
9	Use interfaces to develop Java programs with complete Abstraction	CO1-CO5
10	Create a package and access members from the package to avoid naming conflicts.	CO1-CO5
11	Implement Exception handling to build robust programs.	CO1-CO5
12	Develop Java programs using Multithreading for process synchronization	CO1-CO5
13	Implement various data structures using Collection framework	CO1-CO5

Learning Resources
Text Books
1. Herbert Schildt Java - The Complete Reference, 9th Ed., McGraw-Hill.
Reference Books
1. Y. Daniel Liang Pearson - Introduction to Java Programming 10th Ed.,
e- Resources & other digital material
1. https://nptel.ac.in/courses/106105191