



Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

WEEKLY LESSON PLAN

Department: AIDS

Year / Semester: 2025-26 / Winter

Course Code / Course Name: 10212AD230 / Problem Solving and Testing using Java

UNIT I – Functional Programming

Course Outcome: Apply functional programming features of Java, including lambda expressions, streams, and method references, to solve programming problems efficiently.

Week	Session	Topics to be Covered	Problems to Practice (Hands-On)	Platform
Week 3	Session 1	Collectors API : https://www.geeksforgeeks.org/java/java-collectors/ toList(),toSet(),toCollection(),toMap(),collectingAndThen(),counting(),groupingBy(),joining(),mapping()	Task 1: Part-A:Task 5 given in syllabus Task 2: https://www.hackerrank.com/challenges/java-string-compare/problem	Task-1(Eclipse/VS CODE) Hackerrank: Task 2-4 Leetcode: 6 Mettl: Task:5,7-10
	Session 2	Custom comparators: https://www.geeksforgeeks.org/java/java-comparator-interface/	Task 3. https://www.hackerrank.com/challenges/java-comparator/problem Task 4. https://www.hackerrank.com/challenges/java-sort/problem	
	Session 3	Methods in Comparator Interface,sorting logic:Collections.sort(),Arrays.sort() vs Collections.sort() time complexity	Task 5.Addition using Strings https://tests.mettl.com/authenticateKey/2f174a80 Task 6. https://leetcode.com/problems/sort-the-people/	
	Session 4	Mettl Practice Problems	Task 7:Nth prime: https://tests.mettl.com/authenticateKey/34fd4a41 Task 8:Generate series and find Nth element https://tests.mettl.com/v2/authenticateKey/d2272e10	
	Session 5	Mettl Practice Problems	Task 9: Get Code Through Strings https://tests.mettl.com/authenticateKey/2f174a80 Task 10:Find result after alternate add_sub on N https://tests.mettl.com/authenticateKey/814effc3	