Department of Statistics & Computer Science

University of Kelaniya

ACADEMIC YEAR -2023/2024 (Semester I)

COSC 21063 / BECS 21223 / COST 44233 / COST 44303

Data Structures and Algorithms

Practical Tutorial 05

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1. A student needs a small program to display a list of numbers in a stem-leaf diagram. Write a complete Java program to achieve this task using the List data structure. A stem & leaf diagram is a special table where each data value is split into a "stem" (the first digit or digits) and a "leaf" (usually the last digit).
   Ex: 12, 78, 12, 14, 86, 25, 65,10,2,71

Stem	Leaf
0	2
1	0,2,2,4
2	5
6	5
7	1,8
8	6

2. Suppose that there are 4 products in a company, and their sales figures for three regions (North, South, East) in the first quarter are given below. Write a Java program using List data Structure to determine the following:

Product Name	North	South	East
Product A	1450	467	3800
Product B	5678	4892	2791
Product C	2987	270	6983
Product D	829	1500	29

a. Find out the best-selling product of each region.
b. Determine the overall best-selling product in the first quarter.