East West University

Department of Computer Science and Engineering

Course: CSE246 Algorithm Topic: Dynamic Programming (Part-01) Lab: 05

1. 0-1 Knapsack: You are given a set of items, each with a weight and a value, and a knapsack with a maximum weight capacity. Your task is to determine the maximum value that can be obtained by selecting a subset of the items to fit into the knapsack without exceeding its weight capacity.

Sample input	Sample output
4 23 34 45 56 8	10 Selected Items (1-based index): [2, 4]

2. Sum-of-Subset: Given a set of positive integers and a target sum, your task is to determine whether there exists a subset of the given set whose elements sum up to the target sum.

Sample input	Sample output
5 1 3 5 7 9 12	Yes