VIGNAN'S NIRULA
INSTITUTE OF TECHNOLOGY & SCIENCE FOR WOMEN
(Approved by AICTE, New Delhi & Affiliated to JNTU Kakinada)
Vignan Avenue, Peda Palakaluru, Guntur - 522009
Department of Information Technology

Innovative Practice

Faculty Name : Mr.T.V.Vamsi Krishna
Course Name : Design and Analysis of Algorithms
Class : III B. Tech I Semester
Academic Year : 2021-2022
Title of the Topic : One Minute Paper Summary
Activity Name : Dynamic Programming Vs Greedy algorithms

Objective:

To engage students in actively summarizing their understanding of dynamic programming and greedy algorithms within a minute, focusing on their principles, examples, and key differences in problem-solving approaches..

Activity Steps:

1. **Introduction (5-10 minutes):**

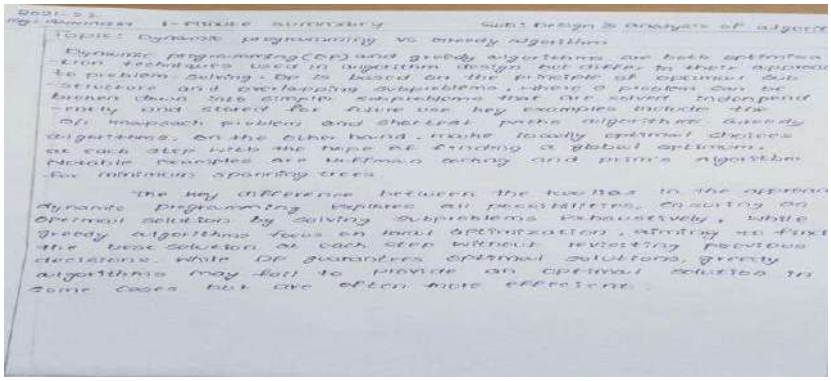
   - Briefly explain the key concepts of dynamic programming and greedy algorithms.
   - Cover topics such as:
     - Dynamic programming: optimal substructure, overlapping subproblems, examples like 0/1 Knapsack and shortest paths.
     - Greedy algorithms: local optimization, examples like Huffman coding and Prim's Algorithm.

   - Highlight the key differences between the two approaches.

2. **One-Minute Paper Activity:**

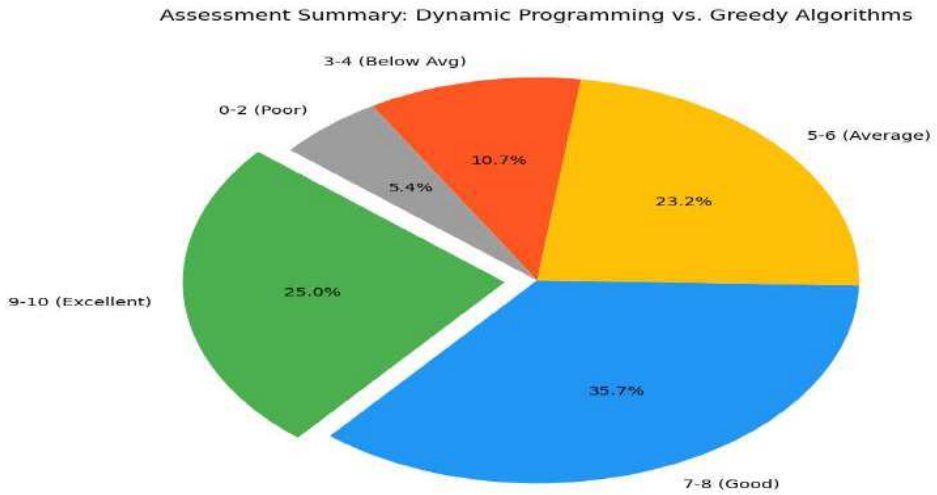
   - At the end of the session, ask students to respond to the following questions in 1 minute:
     "In what scenario would you prefer dynamic programming over greedy algorithms?"
   - Collect their responses.

Screenshot of the Practice



Assessment Analysis

Marks Range	Number of Students	Percentage
9-10 (Excellent)	28	25.0%
7-8 (Good)	34	35.71%
5-6 (Average)	30	23.21%
3-4 (Below Avg)	12	10.71%
0-2 (Poor)	5	5.361%
Total	104	100%



Conclusion

The One-Minute Summary activity conducted as part of assessing students' understanding of dynamic programming and greedy algorithms proved to be an effective and insightful exercise. It highlighted students' grasp of key concepts, fostered critical thinking about problem-solving strategies, and provided valuable feedback for both students.

Signature of the Faculty **Head of the Department**