**Week 1: Linear Data Structures**

* Day 1: Introduction to linked lists
* Day 2-3: Implementing singly linked lists and basic operations (insertion, deletion)
* Day 4-5: Implementing doubly linked lists and their operations
* Day 6: Introduction to stacks and their implementation using arrays or linked lists
* Day 7: Introduction to queues and their implementation using arrays or linked lists

**Week 2: Non-linear Data Structures**

* Day 8: Introduction to trees and binary trees
* Day 9-10: Binary search trees and their operations (insertion, deletion)
* Day 11: Introduction to heaps and heap operations
* Day 12: Introduction to graphs and their representation
* Day 13-14: Depth-First Search (DFS) and Breadth-First Search (BFS) algorithms

**Week 3: Exploring Trees and Graphs**

* Day 15: Understanding binary trees, binary search trees, and AVL trees
* Day 16-17: Implementing tree traversal algorithms (in-order, pre-order, post-order)
* Day 18: Dive into advanced tree problems and balancing techniques
* Day 19: Understanding graph representations and graph algorithms
* Day 20-21: Solve graph-related challenges and classic graph problems

**Week 3: Advanced Algorithms**

* Day 22: Introduction to sorting algorithms (bubble sort, insertion sort)
* Day 23-24: Merge sort and quicksort
* Day 25-26: Introduction to dynamic programming
* Day 27: Basic dynamic programming problems (e.g., Fibonacci sequence)
* Day 28: Introduction to backtracking algorithms
* Day 29-30: Solving a few advanced problems using data structures and algorithms

**Daily Agenda (1 hour)**

* 10 minutes: Review and revise the concepts learned in the previous session
* 40 minutes: Learn new topics, algorithms, or data structures
* 10 minutes: Practice with coding exercises or small programming challenges

**Tips:**

* Collaborate and discuss with your peers regularly to reinforce learning.
* Utilize online platforms like LeetCode, HackerRank, or Codeforces for practice.
* Try solving problems independently first, and then discuss and compare solutions with your peers.
* Encourage each other and celebrate progress during the 30-day learning journey.