

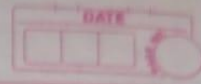
EXPERIMENT 8

Postlab

1. List all the methods which could be used to solve the tower of Hanoi problem.
2. Which is the best approach and why?
3. What are the applications of the Tower of Hanoi?

Name: Namrata G. Joshi
Roll No: 9515
TE CMPSA

Expt-8



Postlab:-

- (1) List all the methods which could be used to solve the tower of Hanoi problem.
Divides the problem into smaller subproblems until a base case is reached
Simulates the recursive process using loops and stacks or queues
Represents the problem using binary numbers and manipulates them to determine moves
Uses formula to calculate the minimum no. of moves without solving recursively

- (2) What is best approach and why?
The recursive approach is favoured for solving the tower of Hanoi problem because it naturally aligns with the problem's recursive nature. It elegantly breaks down the problem into simpler subproblems which simplifies the solution process.

- (3) What are applications of Tower of Hanoi?
It serves as a classic problem for teaching recursion and algorithm design.
It can model logistical and scheduling problems where the objective is to minimize the no. of moves or time required to complete a task.
It has been used in cognitive psychology research to study problem solving strategies and decision making processes.