AI   exp. 8
POSTlab

Q.1] methods to solve Tower of Hanoi prblm
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- Recursive method
- Iterative method
- Binary rep method
- mathematical formula method
- Dynamic prog approach
- Backtracking algo

Q.2] Best approach & why?
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- The recursive method is often considered the best approach for solving Tower of Hanoi problem
- It's simple, elegant & directly mirrors the prblm's recursive nature
- Recursive solutn tend to be easier to understand & implement compared to iterative ov other methods
- moreover, the recursive method has tim. C of $O(2^n)$ when n is no. of disks makes efficient

Q.3) Applications of Tower of Hanoi?

→ Education :-

- It's commonly used as teaching tool in C.S course to illustrate recursion, algo & p.s strategy

- optimization :
  The prblms mathematical propery cu used in optimization theory & algo design

- Puzzle games : ven

- Variation of Tower of Hanoi em popula puzl games for entrtau & brain training

- Automation : In automated system, Tower of Hanoi prblm can represent tasks involving moving items betwen diff locations efficiently