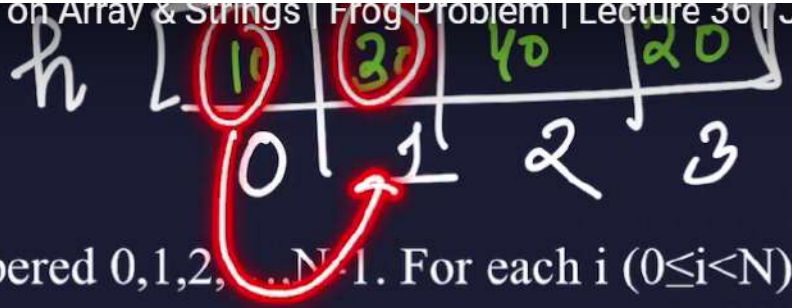
PW SKILLS

Today's Checklist

- Given a string containing digits from 2-9 inclusive, return all possible letter combinations that the number could represent.
- Frog problem

PW SKILLS

Try this



There are N stones, numbered 0,1,2,...N-1. For each i (0≤i<N), the height of Stone i is hi. There is a frog who is initially on Stone 0. He will repeat the following action some number of times to reach Stone N-1:

If the frog is currently on Stone i, jump to Stone i+1 or Stone i+2.

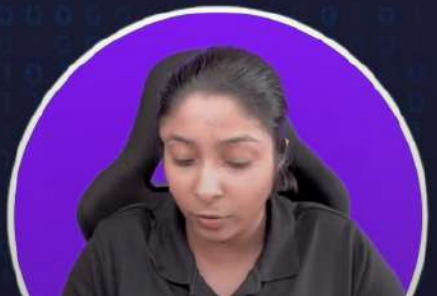
Here, a cost of |hi - hj| is incurred, where j is the stone to land on.

Find the minimum possible total cost incurred before the frog reaches Stone N.

Input n= 4

arr[]=10 30 40 20

Output= 30



PW SKILLS

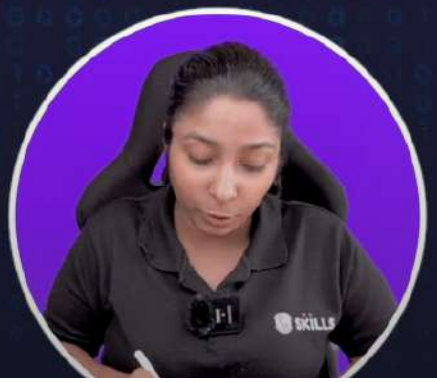
h →

10	30	40	20
0	1	2	3

$0 \rightarrow 1 \rightarrow 2 \rightarrow 3 = 20 + 10 + 20 = 50$

$0 \rightarrow 2 \rightarrow 3 = 30 + 20 = 50$

$0 \rightarrow 1 \rightarrow 3 = 20 + 10 = 30$



$f(h, n, idx)$

Starting from idx, minimum cost to reach (n-1)th idx

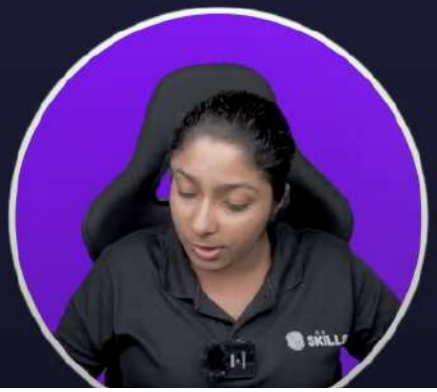
$$= \min \left\{ \begin{array}{l} |h[idx] - h[idx+1]| + f(h, n, idx+1) \\ |h[idx] - h[idx+2]| + f(h, n, idx+2) \end{array} \right\}$$

Try this

Given a string containing digits from 2-9 inclusive, return all possible letter combinations that the number could represent. Return the answer in any order.

Input: digits = "23"

Output: ["ad","ae","af","bd","be","bf","cd","ce","cf"]



Recursion Questions 9 | Recursion on Array & Strings | Frog Problem | Lecture 36 | Java & DSA Course