Ques Insert operator

n	R
4	4

1 2 3 4 = R

⇒ 1 + 2 − 3 + 4 ⇒ 4

−4
+3
−2

b s boolean IP(long arr, idx, sum) — end

Expectation

IP(arr, 3, k)

⇒ True

Faith

IP(arr, 2, sum) ← True/False

0	1	2	3
1	2	3	4

idx − 1

ans1 = IP(arr, 2, k − arr[3])

ans2 = IP(arr, 2, k + arr[3])

return ans1 || ans2;

ans1 = IP(arr, idx−1, sum − arr[idx])

ans2 = IP(arr, idx − 1, sum + arr[idx])

return ans1 || ans2;

Base Case

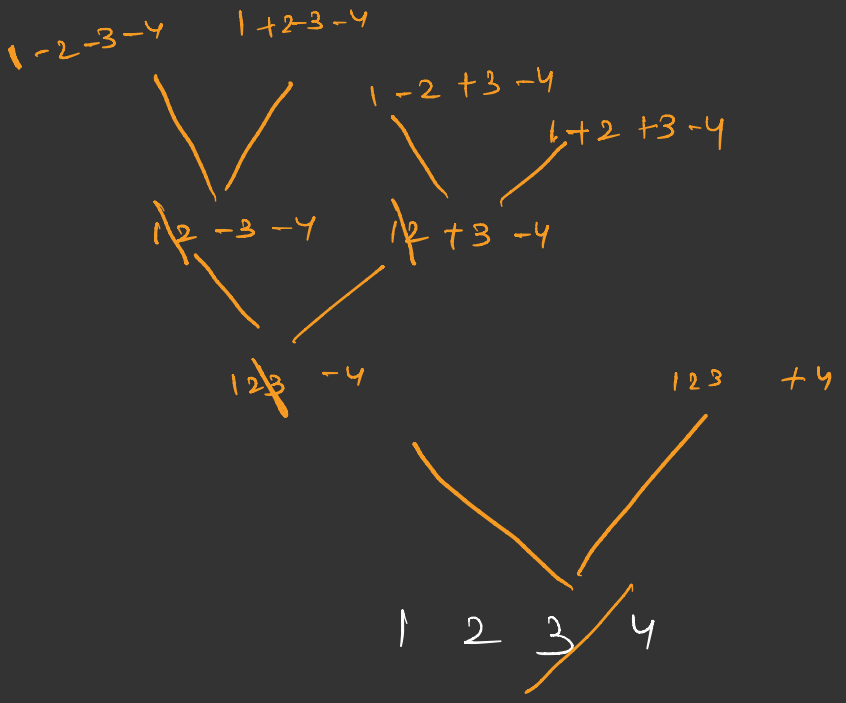
```
if(idx == 0)
    return arr[0] == sum;
ans1 = IP(arr, idx-1, sum - arr[idx])
ans2 = IP(arr, idx - 1, sum + arr[idx])
return ans1 || ans2;
```

0	1	2	3
1	2	3	4

1	IP(1, 3) T
2	IP(2, 0) F
1	P(3 4)

idx sum

R=4



Ques Tribonacci Series

	0	0	1	1	2	4	7	13	24 .....
nth	1	2	3	4	5	6	7	8	9

Expectation

T(6)

⇒ 4

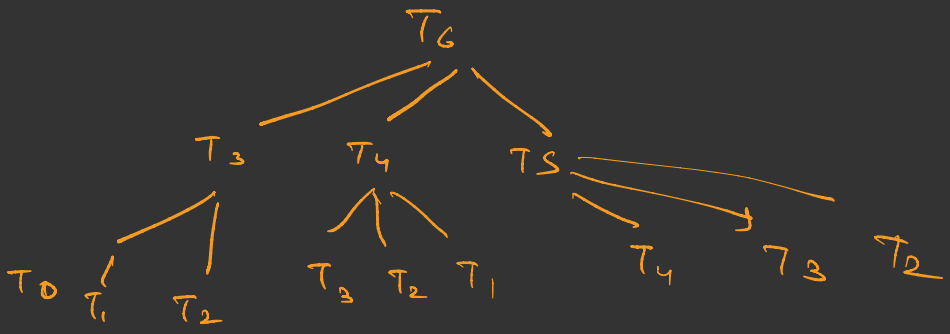
Faith

T(5) ⇒ 2

T(4) ⇒ 1

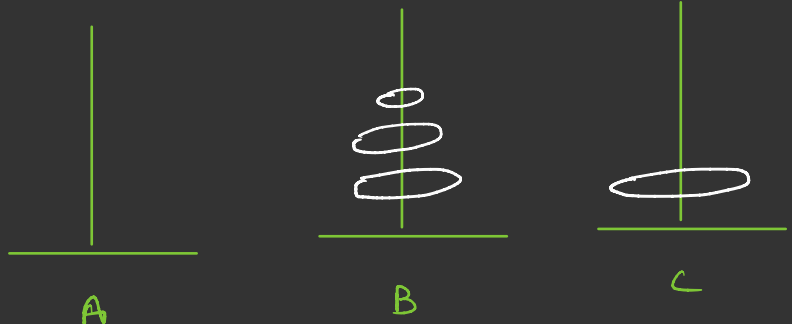
T(3) ⇒ 1

```
t5 = T(5);
t4 = T(4);
t3 = T(3);
return t3+t4+t5
```



Ques

4



Print

Expectations

Faith

toh(4, A, B, C)

s n d

```
if(n==0) return
toh(3, A, C, B);
Syso(move disk 4 from A to C)
toh(3, B, A, C);
```

Ques Find max

7	9	1	3	10	11

⇒ 11

Ques Find first index

7

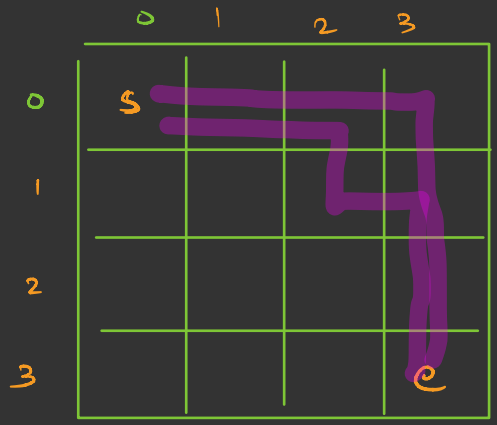
0	1	2	3	4	5
1	7	9	4	3	7

⇒ 1

10 ⇒ -1

Ques Find last index

Ques Count maze path



D

RRR DDD

RRD RDD

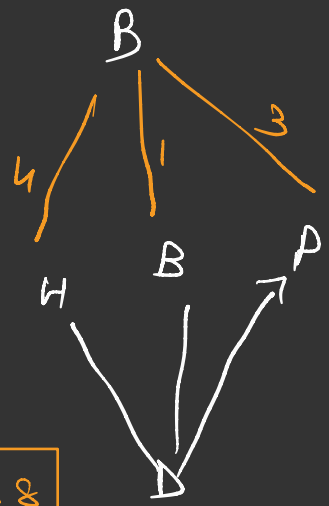
RDR RDD

R R D

R D R

D R R

6	3	1
3	2	1
1	1	e'



$\Rightarrow 4+1+3 = 8$

$D \longrightarrow B$