DAY 38

INTERVIEW BIT PROBLEMS :

1. Pascal Triangle

Given numRows, generate the first numRows of Pascal's triangle.
Pascal's triangle : To generate A[C] in row R, sum up A'[C] and A'[C-1] from previous row R
- 1.
Example:
Given numRows = 5,
Return
[
    [1],
    [1,1],
    [1,2,1],
    [1,3,3,1],
    [1,4,6,4,1]
]

CODE :

PYTHON

```python
class Solution:
    # @param A : integer
    # @return a list of list of integers
    def solve(self, A):
        out=[]
        for l in range(1,A+1):
            ele=1
            temp=[]
            for i in range(1,l+1):
                temp.append(ele)
                ele=int(ele*(l-i)//i)
            out.append(temp)
        return out
```

2. Kth Row of Pascal's Triangle

Given an index k, return the kth row of the Pascal's triangle.
Pascal's triangle :   To generate A[C] in row R, sum up A'[C] and A'[C-1] from previous row
R - 1.
Example:
Input : k = 3

Return : [1,3,3,1]

NOTE : k is 0 based. k = 0, corresponds to the row [1].

CODE :

C++

```cpp
vector<int> Solution::getRow(int A) {
    vector<int>temp;
        int n   = 1;
        for( int l = 0; l <= A ; l++){
           temp.push_back(n);
                  n = n * (A - l)/(l + 1);
    return temp;
}
```