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Question:

Write a program to generate and print the first n rows of Pascal's triangle without using built-in math or array functions.

Test case:

For n = 5, the output should be:

```
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
```

Source Code:

```
#include <stdio.h>
int main() {

    int rows=0;
    printf("no. of rows: ");
    scanf("%d", &rows);

    for (int i = 0; i < rows; i++) {
        for (int j = 0; j <= i; j++) {
            int flag = 1;
            for (int k = 1; k <= j; k++) {
                flag = flag * (i - k + 1) / k;
            }
            printf("%d ", flag);
        }
        printf("\n");
    }
    return 0;
}
```

Sample Input and Output:

```
no. of rows: 5
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1

Process returned 0 (0x0)   execution time : 3.718 s
Press any key to continue.
```

```
no. of rows: 9
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
1 5 10 10 5 1
1 6 15 20 15 6 1
1 7 21 35 35 21 7 1
1 8 28 56 70 56 28 8 1

Process returned 0 (0x0)   execution time : 2.231 s
Press any key to continue.
```

```
no. of rows: 15
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
1 5 10 10 5 1
1 6 15 20 15 6 1
1 7 21 35 35 21 7 1
1 8 28 56 70 56 28 8 1
1 9 36 84 126 126 84 36 9 1
1 10 45 120 210 252 210 120 45 10 1
1 11 55 165 330 462 462 330 165 55 11 1
1 12 66 220 495 792 924 792 495 220 66 12 1
1 13 78 286 715 1287 1716 1716 1287 715 286 78 13 1
1 14 91 364 1001 2002 3003 3432 3003 2002 1001 364 91 14 1

Process returned 0 (0x0)   execution time : 1.159 s
Press any key to continue.
```