b.

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

```
#include <stdio.h>
// Function to calculate factorial
int factorial (int n) {
int fact = 1;
 for (int i=1; i<=n; i++)
 fact *= i;
 return fact;
}
```

```
// Function to calculate binomial coefficient C(n,k)
int binomial (int n, int k) {
return factorial (n) / (factorial (k) * factorial (n-k));
}

int main () {
  int rows;
  printf ("Enter number of rows : ");
  scanf ("%d", &rows);
  for (int i=0 ; i<rows ; i++) {
    for (int space=0 ; space < rows-i-1 ; space++) {
    printf (" ");
    }
   for (int j=0 ; j<=i ; j++) {
   printf ("%d", binomial (i,j));
   }
   printf ("\n");
  }
 return 0;
}
```

exp3loopspyramid1.c ● | exp3loopspyramid2.c ×

exp3loopspyramid2.c > ...

```c

#include <stdio.h>

// Function to calculate factorial
int factorial(int n) {
    int fact = 1;
    for (int i = 1; i <= n; i++)
        fact *= i;
    return fact;
}

// Function to calculate binomial coefficient C(n, k)
int binomial(int n, int k) {
    return factorial(n) / (factorial(k) * factorial(n - k));
}

int main() {
    int rows;

    // Ask user for number of rows
    printf("Enter number of rows: ");
    scanf("%d", &rows);

    for (int i = 0; i < rows; i++) {
        // Print leading spaces for alignment
        for (int space = 0; space < rows - i - 1; space++) {
            printf(" ");
        }

        // Print values in the row
        for (int j = 0; j <= i; j++) {
            printf("%d ", binomial(i, j));
        }

```

```
34
35              printf("\n");
36          }
37
38          return 0;
39      }
40
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS

```
d2.c -o exp3loopspyramid2 } ; if ($?) { .\exp3loopspyramid2 }
Enter number of rows: 5
    1
   1 1
  1 2 1
 1 3 3 1
1 4 6 4 1
PS C:\Users\abiga\OneDrive\Desktop\Absproj>
```