Problem statement

Print Pascal's Triangle:-Write a program to generate and print the first n rows of Pascal's triangle without using built-in math orarray functions. For n = 5, the output should be:

Solution

```c
#include <stdio.h>

int main()

{

   int n;

   printf("enter the value for n ");

   scanf("%d",&n);

   for (int i = 0; i < n; i++)

   {

   for (int k = 0; k < n - i - 1; k++)

   {

   printf(" ");

   }

   int value = 1;

   for (int j = 0; j <= i; j++)

   {

   printf("%d ", value);

   value = value * (i - j) / (j + 1);

   }

   printf("\n");

   }return 0;

}
```

Outputs

```
enter the value for n3
  1
 1 1
1 2 1
```

```
enter the value for n4
  1
 1 1
1 2 1
1 3 3 1
```

```
enter the value for n5
   1
  1 1
 1 2 1
1 3 3 1
1 4 6 4 1
```