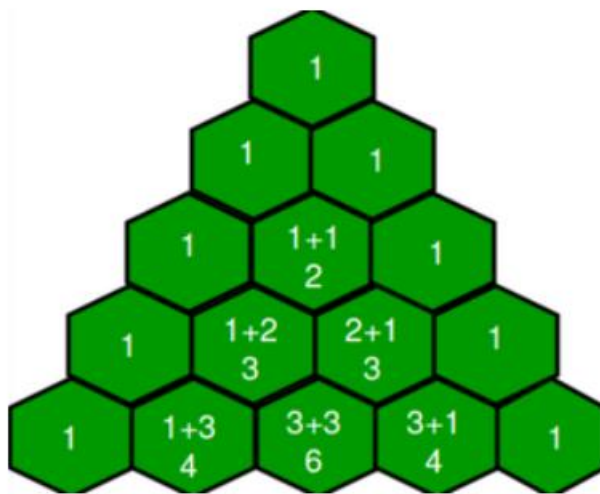


Pascal Triangle Program in C

Problem Statement :

Pascal's Triangle is a pattern in which the first row consists of a single number 1, and each row begins and ends with the number 1. The numbers in between are obtained by adding the two numbers directly above them in the previous row. In this article, we will see how to print Pascal's triangle in C programming language.



Pascal's Triangle is a triangular array of binomial coefficients in which the n^{th} row contains binomial coefficients ${}^nC_0, {}^nC_1, {}^nC_2, \dots, {}^nC_n$.

nC_r can be represented as $C(n, r)$ and this represents the n^{th} row's r^{th} element in Pascal's pyramid. The idea is to calculate $C(n, r)$ using $C(n, r-1)$. It can be calculated in $O(1)$ time using the following formula:

$$C(n, r) = \frac{C(n, r-1) * (n - r + 1)}{r}$$

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