//C(n ,k)

// Returns value of Binomial Coefficient C(n, k)

//Space and Time efficient

//Complexity : O(k)

long long binomialCoeff(long long n, long long k) {

long long res = 1;

// Since C(n, k) = C(n, n-k)

if ( k > n - k )

k = n - k;

// Calculate value of [n \* (n-1) \*---\* (n-k+1)] / [k \* (k-1) \*----\* 1]

for (long long i = 0; i < k; ++i)

{

//note: devide first then multiply to avoid overflow, decimal can be taken

//after every calcualation round up the value

res \*= (n - i);

res /= (i + 1);

}

return res;

}