17.BINOMIAL COEFFICIENT

#include<stdio.h>

#include<stdlib.h>

int factorial(int num) {

if (num == 0 || num == 1) {

return 1;

} else {

return num \* factorial(num - 1);

}

}

int binomialCoefficient(int n, int k) {

if (n < 0 || k < 0) {

printf("\nInvalid input. Enter correct values.\n");

exit(1);

}

if (k > n) {

return 0;

} else {

int nCr = factorial(n) / (factorial(k) \* factorial(n - k));

return nCr;

}

}

int main() {

int n1, n2;

printf("Enter the value of n: ");

if(scanf("%d", &n1)!= 1) {

printf("Invalid input. Please enter a valid integer.\n");

exit(1);

}

printf("Enter the value of k: ");

if(scanf("%d", &n2)!= 1) {

printf("Invalid input. Please enter a valid integer.\n");

exit(1);

}

int binomial = binomialCoefficient(n1, n2);

printf("The binomial coefficient is %d\n", binomial);

return 0;

}

OUTPUT

