**Define a function named fact() to calculate factorial of a number n and then write a program that uses this function fact() to calculate combination and permutation.**

**#include<stdio.h>**

**#include<conio.h>**

**long int fact(int);**

**int main()**

**{**

**int n,r,p,c;**

**printf("Enter the value of n and r:\t");**

**scanf("%d %d",&n,&r);**

**p=fact(n)/fact(n-r);**

**c=fact(n)/(fact(n-r)\*fact(r));**

**printf("\npermutation = %d",p);**

**printf("\ncombination = %d",c);**

**getch();**

**return 0;**

**}**

**long int fact(int n)**

**{**

**int f=1,i;**

**for (i=2;i<=n;i++)**

**{**

**f=f\*i;**

**}**

**return f;**

**}**