7 July

**C Program to find all possible permutations in which ‘n’ people can occupy ‘r’ seats.**

#include<stdio.h>

int fact(long int x)

{

long int f=1,i;

for(i=1;i<=x;i++)

{

f=f\*i;

}

return f;

}

int main()

{

long int n,r,p,temp;

long int num,den;

printf("Enter the number of seats available : ");

scanf("%ld",&r);

printf("Enter the number of persons : ");

scanf("%ld",&n);

if(n < r)

{

temp=n;

n=r;

r=temp;

}

num=fact(n);

den=fact(n-r);

p=num/den;

printf("Number of ways people can be seated : ");

printf("%ld",p);

}