***Suppose you give dinner party for six guests, but your table seats only four. In how many ways can four of six guests arrange themselves at the table? Any of six guests can sit in first chair. Any of the remaining five can sit in the second chair. Any of the remaining four can sit in third chair, and any of the remaining three can sit in the four chair. (the last two will have to stand). So the number of possible arrangements of six guests in four chairs is 6\*5\*4\*3, which is 360. Write a program that calculates the number of possible arrangements for any number of guests and any number of chairs.***

***(assume there will never be fewer guests than chairs) a simple for loop should do it.)***

#include<iostream>

using namespace std;

void main()

{

system("color b0");

int chair;

int guest,z=1;

cout<<"enter the number of chairs";

cin>>chair;

cout<<"enter the number of guest";

cin>>guest;

for(int i=guest;i>=guest-chair;i--) /\* guest - chair same rahy ga serf i may decerement ho ga.

it is basicaly factroial type question.\*/

{z=z\*i;}

cout<<"possible arrangements are"<<z<<endl;

getchar();

getchar();

}