Taylor's Series

```
#include<iostream.h>
#include<conio.h>
#include<math.h>
long int factorial(int n);

void main()
{
 int x,i;
 float s,r;
 char c;

cout<<"You have this series:-1+x/1! + x^2/2! + x^3/3! +
x^4/4!..x^x/x!"<<endl;
 cout<<"To which term you want its sum of ?  ";
 cin>>x;
 s=0;
 for (i=1;i<=x;i++)
  {   s=s+((float)pow(x,i)/(float)factorial(i));
}
 cout<<"The sum of "<<x<<" terms is "<<1+s;

 getch();
}

long int factorial(int n)
 {
  if (n<=1)
 return(1);
  else
 n=n*factorial(n-1);
 return(n);
 }

 /*
 Sample I/O:
You have this series:-1+x/1! + x^2/2! + x^3/3! + x^4/4!..x^x/x!
To which term you want its sum of ?  3
The sum of 3 terms is 13
*/
```