

WAP to calculate the value of a series: $1 + 2^2 + 3^3 \dots n^n$.

```
#include<stdio.h>
#include<math.h>
void main(){
int n, i, sum = 0;
printf("Enter any integer:");
scanf("%d",&n);
for(i=1;i<=n;i++)
    sum = sum + pow (i,i);
printf("\nSum = %d",sum);
}
```

WAP to calculate the value of a series: $\frac{1}{2} + \frac{3}{4} + \frac{5}{6} \dots n$ terms.

```
#include<stdio.h>
void main(){
int n,i,j;
float sum = 0;
printf("Enter any integer:");
scanf("%d",&n);
for(i=1,j=1;i<=n;i++,j=j+2)
    sum = sum + (float)j/(j+1);
printf("\nSum=%f",sum);
}
```

WAP to calculate the value of a series: $\frac{1}{2} - \frac{3}{4} + \frac{5}{6} - \frac{7}{8} \dots n$ terms.

```
#include<stdio.h>
void main(){
int n,i,j,s=1;
float sum = 0;
printf("Enter any integer:");
scanf("%d",&n);
for(i=1,j=1;i<=n;i++,j=j+2)
{
    sum = sum + s * (float)j/(j+1);
    s=-s;
}
printf("\nSum=%f",sum);
}
```

WAP to calculate the value of a series: $1/1! + 2/2! + 3/3! \dots n/n!$.

```
#include <stdio.h>
void main(){
float n,sum=0, f=1, i;
printf("Enter the value:");
scanf("%f",&n);
for(i=1;i<=n;i++)
{
    f = f * i;
    sum = sum + (i/f);
}
printf("Sum of the series= %f",sum);
}
```

WAP to calculate value of a series: $x - x/2! + x/3! - x/4! \dots x/n!$

```
#include<stdio.h>
void main(){
float n,sum=0, f=1, i, s=1,x;
printf("Enter value of n and x:");
scanf("%f%f", &n,&x);
for(i = 1; i <= n; i++) {
```