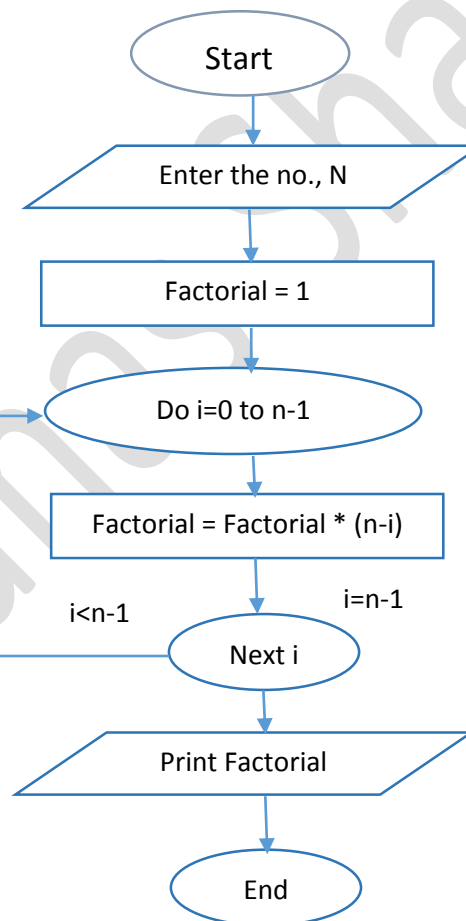


Aim: To calculate the factorial of a number.

Algorithm:

1. Enter the no., n.
2. Initialize factorial=1.
3. Begin For i=0 to n-1
 factorial=factorial * (n-i)
 End for
4. Print factorial.

Flow Chart:



Program:

```
//factorial of a no.
#include<iostream>
using namespace std;
int main()
{
long int n; //The no. whose factorial is to be calculated
cout<<"Enter the no.\n"; //Ask user for the no.
cin>>n; //Read the no.
int i; //for loop
float fact=1; //factorial initialization
for(i=0;i<n-1;i++) //loop for calculation of factorial
{
fact=fact*(n-i); //formula
}
cout<<"The factorial of "<<n<<" is "<<fact<<endl; //display output
return 0;
}
```

Output:

```
Enter the no.
5
The factorial of 5 is 120
```

```
Enter the no.
9
The factorial of 9 is 362880
```

```
Enter the no.
17
The factorial of 17 is 3.55687e+14
```