

5. Write a program to find the Factorial of a number using recursion.

PROGRAM:

```
def factorial(n):  
    if n==0 or n==1:  
        return 1  
    else:  
        return n*factorial(n-1)  
n=int(input("Enter the number:"))  
result=factorial(n)  
print("The factorial of ",n," is:",result)
```

INPUT:

```
Enter the number:5
```

OUTPUT:

```
The factorial of 5 is: 120
```

TIME COMPLEXITY:

Time complexity of the above code is

$f(n)=O(n)$