

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

Code:

```
def fact(x):  
    if x==1:  
        return 1  
    else:  
        return (x*fact(x-1))  
num=int(input("Enter a number: "))  
print(f"Factorial of {num} is {fact(num)}")
```

Output:

```
Enter a number: 6  
Factorial of 6 is 720  
|
```

Time Complexity:

- $T(n) = O(n)$