5.write a program to find factorial of a number using recursion

Program:-

```python
def factorial(n):
    if n == 0:
        return 1
    else:
        return n * factorial(n-1)
num = int(input("Enter a number: "))
print("Factorial of", num, "is", factorial(num))
```

output:-

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


=== Code Execution Successful ===
```

Time complexity:-O(n)