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

PROGRAM:

```
def factorial(n):
    if n <=1:
        return 1
    else:
        return n*factorial(n-1)


n=int(input("enter the number"))
result=factorial(n)
print(f"the factorial of {n} is :",result)
```

INPUT: `enter the number: 5`

OUTPUT: `the factorial of 5 is :   120`

TIME COMPLEXITY: O(n)