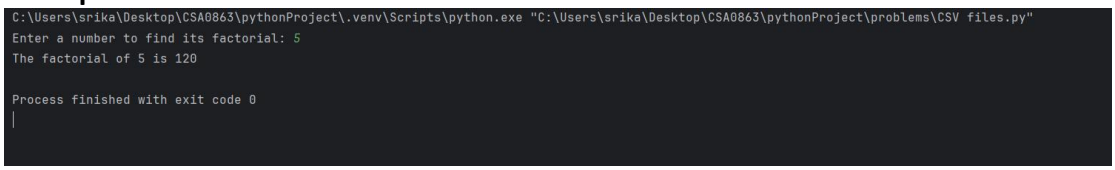
5.Write a program to find the Factorial of a number using recursion.

Program:

```
def factorial(n):
    if n == 0:
        return 1
    else:
        return n * factorial(n - 1)
def main():
    num = int(input("Enter a number to find its factorial: "))
    if num < 0:
        print("Factorial is not defined for negative numbers.")
    else:
        fact = factorial(num)
        print("The factorial of", num, "is", fact)
if __name__ == "__main__":
    main()
```

Output:



Time complexity:O(n)