Aim: Write the program for the following: (by using control statements and control structure)

(F). Write a recursive function to print the factorial for a given number.

Theory: -

Practical Implementation:-

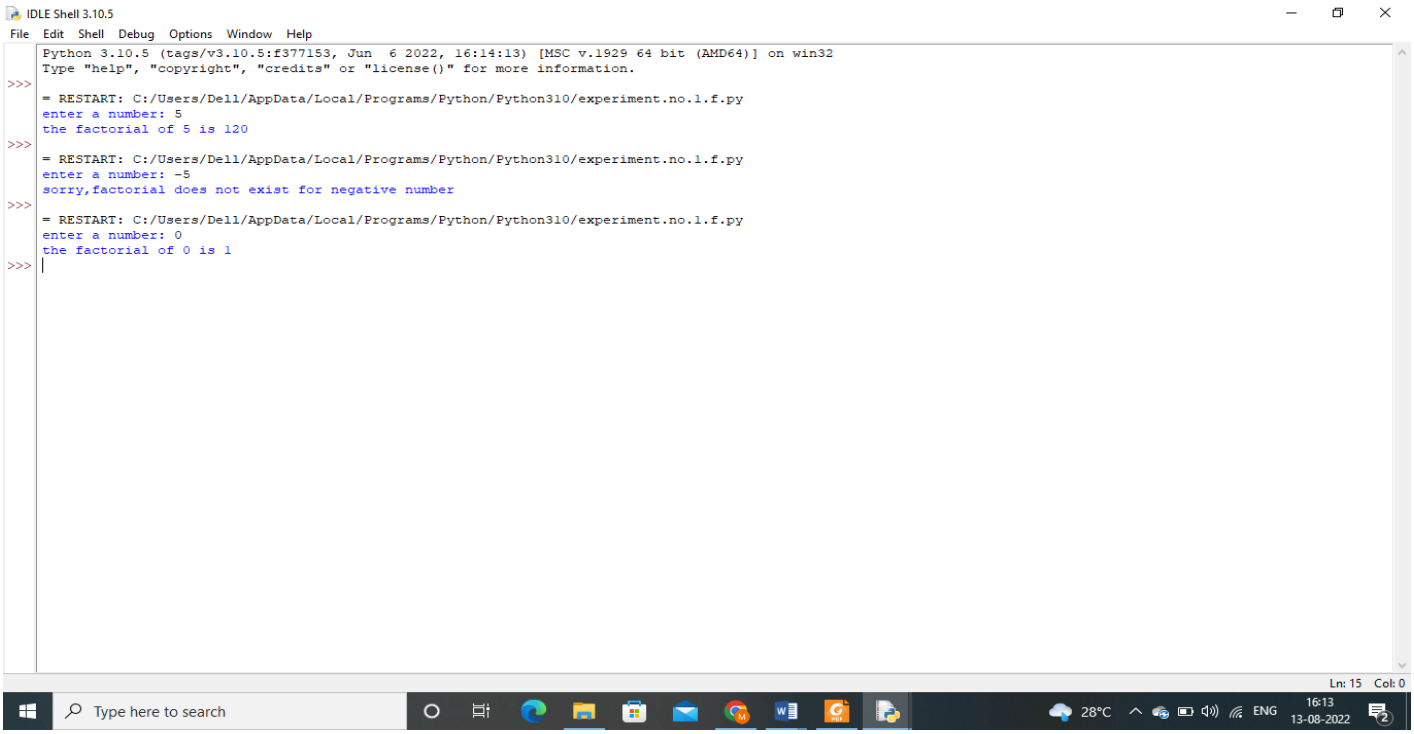
```
# python program to find the factorial of a number using recursion


def recur_factorial (n):
   """function to return the factorial of a number using recursion"""
   if n == 1:
      return n
   else:
      return n*recur_factorial(n-1)


# take input from the user
num = int(input("enter a number: "))


# check is the number is negative
if num < 0:
   print("sorry,factorial does not exist for negative number")
elif num == 0:
   print("the factorial of 0 is 1")
else:
   print("the factorial of",num,"is",recur_factorial(num))
```

output:-



Conclusion:-