

#implement a recursive function to calculate the factorial of a given number

"""

$1! = 1 \times 1$

$2! = 2 \times 1! \rightarrow 2 \times 1$

$3! = 3 \times 2! \rightarrow 3 \times 2 \times 1$

.

.

$10! = 10 \times 9! \rightarrow 10 \times 9 \times 8 \times \dots \times 1$

Formula = $n \times (n-1)!$

"""

```
def fact_rec(n):
```

```
    if n == 0 or n == 1:
```

```
        return True
```

```
    else:
```

```
        return n * fact_rec(n-1)
```

```
number = int(input("Enter the value:"))
```

```
res = fact_rec(number)
```

```
print("The factorial of {} is {}".format(number,res))
```