

## Factorial

**Factorial:-** The factorial of a number is the product of all the integers from 1 to that number.

For example, the factorial of 6 is  $1*2*3*4*5*6 = 720$ . Factorial is not defined for negative numbers, and the factorial of zero is one,  $0! = 1$ .

code example:-

```
# Python program to find the factorial of a  
number provided by the user.
```

```
# To take input from the user
```

```
num = int(input("Enter a number:
```

"))

factorial = 1

# check if the number is negative, positive, or zero

if num < 0:

print("Sorry, factorial does not exist for negative numbers")

elif num == 0:

print("The factorial of 0 is 1")

else:

for i in range(1, num + 1):

factorial = factorial \* i

print("The factorial of", num, "is", factorial)