

Function in python

function is a block of code that be reused in a program:

factorial of a number is the product of all the positive integers less than or equal to the number

factorial of 5= $5 \times 4 \times 3 \times 2 \times 1 = 120$

```
In [5]: number=int(input("enter a number to find its factorial :"))
factorial=1
if number==0:
    print("the factorial of 0 is 1")

else:
    for i in range(1,number+1):#range(1,6)
        factorial=factorial*i
print("the factorial of ",number,"is ",factorial)
```

```
enter a number to find its factorial :4
the factorial of 4 is 24
```

Factorial function

```
In [27]: def factorial_value(num):
        factorial=1
        if num==0:
            return factorial

        else:
            for i in range(1,num+1):
                factorial=factorial*i
            return factorial
```

```
In [29]: print(factorial_value(10))
```

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3628800
```

thanku

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In [ ]:
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