

# import math function

```
In [1]: x=sqrt(25) #sqrt is build function
```

```
-----  
NameError                                Traceback (most recent call last)  
Cell In[1], line 1  
----> 1 x=sqrt(25)  
  
NameError: name 'sqrt' is not defined
```

```
In [4]: #help()
```

```
In [6]: import math #math is module
```

```
In [8]: x=math.sqrt(25)  
x
```

```
Out[8]: 5.0
```

```
In [10]: x1=math.sqrt(15)  
x1
```

```
Out[10]: 3.872983346207417
```

```
In [12]: print(math.floor(3.87)) #floor- minimum or least value  
3
```

```
In [14]: print(math.ceil(3.87)) #ceil-maximum or highest value  
4
```

```
In [16]: print(math.pow(3,2))  
9.0
```

```
In [18]: print(math.pi) # these are constant  
3.141592653589793
```

```
In [20]: print(math.e) #these are constant  
2.718281828459045
```

```
In [24]: import math as m  
m.sqrt(10)
```

```
Out[24]: 3.1622776601683795
```

```
In [28]: from math import sqrt,pow #math has many function if you want to call specific func  
pow(2,3)
```

Out[28]: 8.0

In [30]: `round(pow(2,3))`

Out[30]: 8

In [36]: `from math import *`  
`pow(2,3)`

Out[36]: 8.0

In [38]: `from math import *`  
`floor(2.3)`

Out[38]: 2

In [40]: `from math import *`  
`print(pow(2,3))`  
`print(floor(2.3))`

8.0  
2

In [42]: `round(pow(2,3))`

Out[42]: 8

<https://docs.python.org/3/library/math.html>

In [44]: `round(2.5)`

Out[44]: 2

In [46]: `ceil(2.5)`

Out[46]: 3

## USER INPUT FUNCTION IN PYTHON || Command line input

In [49]: `x=input()`  
`y=input()`  
`z=x+y`  
`print(z)` *# console is waiting for user to enter input*  
*# also if you work in idle*

56

In [51]: `x1=input('Enter the 1st number')` *# whenever you works in input function it always g*  
`y1=input('Enter the 2nd number')` *# it won't understand as arithmetic operator*  
`z1=x1+y1`  
`print(z1)`

34

```
In [53]: x1=input('Enter the 1st number') # whenever you works in input function it always g
a1=int(x1)
y1=input('Enter the 2nd number') # it won't understand as arithmetic operator
b1=int(y1)
z1=a1+b1
print(z1)
```

30

```
In [57]: x2=int(input('Enter the 1st number'))
y2=int(input('Enter the 2nd number'))
z2=x2+y2
z2 # this code is easier then the above code
```

Out[57]: 30

## Lets take input from the user in char format, but we don't have char format in python

```
In [62]: ch=input('enter a char')
print(ch)
```

hello

```
In [64]: ch=input('enter a char')[0] #entered index 0th index
print(ch)
```

h

```
In [66]: ch1=input('enter a char')[0:7]
print(ch1)
```

hello

```
In [68]: ch=input('enter a char')[1:3]
print(ch)
```

el

## using expressions

EVAL Function Using Input

```
In [70]: ch=input('enter a char')
print(ch) # if you enter as 2+6-1 we get output as 2+6-1 only
```

2+3-3

```
In [72]: ch3=int(input('enter a char'))  
print(ch3)
```

56

```
In [74]: ch4=eval(input('enter a expression'))  
print(ch4)
```

2

```
In [77]: result=eval(input('enter an expr'))  
print(result)
```

20

```
In [ ]:
```

```
In [ ]:
```