

Import Math module

Math module provides mathematical functions like squareroot,power,pi,trigonometry etc.

Math.sqrt()

returns square root of a number.

```
In [4]: import math #Math is a module  
print(math.sqrt(25)) # sqrt is a inbuild function
```

5.0

```
In [5]: print(math.sqrt(45))
```

6.708203932499369

```
In [6]: print(math.sqrt(15))
```

3.872983346207417

Math.pow()

Returns a raised to the power b.

```
In [7]: import math  
print(math.pow(2,3))
```

8.0

```
In [8]: print(math.pow(4,6))
```

4096.0

math.floor()

rounds down to the nearest integer.

```
In [9]: print(math.floor(2.9))
```

2

```
In [10]: print(math.floor(4.9))
```

4

math.ceil()

```
In [11]: print(math.ceil(2.9))
```

3

```
In [12]: print(math.ceil(4.9))
```

5

```
In [13]: print(math.pi) # these are constant
```

3.141592653589793

```
In [14]: print(math.e) #constant
```

2.718281828459045

input()

```
In [2]: x=input()  
y=input()  
z=x+y  
print(z)
```

56

```
In [3]: print(type(x))  
print(type(y))
```

<class 'str'>
<class 'str'>

```
In [2]: x1=int(input("enter the 1st number"))  
y1=int(input("enter the 2nd number"))  
z1=x1+y1  
print(z1)
```

10

```
In [15]: ch = input('enter a char')  
print(ch)
```

nit

```
In [16]: print(ch[0])
```

n

```
In [17]: print(ch[0])
```

n

```
In [18]: print(ch[-1])
```

t

```
In [19]: ch = input('enter a char')[0]
         print(ch)
```

h

```
In [20]: ch = input('enter a char')[1:3]
         print(ch)
```

yd

```
In [9]: x2=input("user name:")
        y2=input("password:")
        z2=x2+y2
        print(z2)
```

hello1234

```
In [10]: st=input("enter a string")
         print(st)
```

hello

```
In [11]: st=input("enter a string")[1]
         print(st)
```

e

```
In [12]: result=int(input("enter an expr"))
         print(result)
```

```
-----
ValueError                                Traceback (most recent call last)
Cell In[12], line 1
----> 1 result=int(input("enter an expr"))
      2 print(result)

ValueError: invalid literal for int() with base 10: '5+8+3'
```

eval()

execute a string as python code and returns the result.

```
In [13]: result=eval(input("enter an expr"))
         print(result)
```

10

```
In [2]: result=eval(input("enter an expr"))
         print(result)
```

9

```
In [ ]:
```