

## input

- input is the keyword is used to take the values from user keyboard

```
In [ ]: city='hyd'    # hard coded
```

```
In [3]: input
```

```
Out[3]: <bound method Kernel.raw_input of <ipykernel.ipkernel.IPythonKernel object at 0x000026A080F92B0>>
```

- bound method
- function
- both are indicates we are missing the brackets parantheses

```
In [10]: input()
```

```
Out[10]: 'naresh it'
```

```
In [ ]: a=10  
a
```

```
In [12]: input()  
input()  
input()
```

```
Out[12]: 'hyd'
```

```
In [18]: input('enter th name:')  
input('enter age:')  
input('enter city:')
```

```
Out[18]: 'hyd'
```

```
In [35]: name=input('enter th name:')  
age=input('enter age:')  
city=input('enter city:')  
print(f'My name is {name}, my age is {age} and i came from {city}')
```

My name is naresh it, my age is 30 and i came from hyd

```
In [22]: n1=100  
n2=200  
add=n1+n2  
print(add)
```

300

```
In [32]: n1=input('enter the number1:') # '100'  
n2=input('enter the number2:') # '200'  
n1+n2    # '100'+ '200'
```

Out[32]: '100200'

### Note

- If the user takes any value from keyboard by default it is a string data type
- even if we take numbers also it is string data type
- so we need to convert string to either int or float

```
In [26]: input()
```

Out[26]: '100'

```
In [28]: '100'+'200'
```

Out[28]: '100200'

```
In [30]: 100+200
```

Out[30]: 300

```
In [ ]: name='naresh it'
age=20
city='city'
print(f'My name is {name}, my age is {age} and i came from {city}')
```

```
In [37]: int('100')
```

Out[37]: 100

```
In [ ]: n1=int(input('enter the number1:'))
n2=int(input('enter the number2:'))
```

```
In [51]: n1=int(input('enter the number1:'))
n2=int(input('enter the number2:'))n1+n2
```

Out[51]: '100200'

```
In [53]: '100'
```

Out[53]: '100'

```
In [55]: int('100')
```

Out[55]: 100

```
In [57]: n1=int(input('enter the number1:')) # int('100')
n2=int(input('enter the number2:')) # int('200')
n1+n2 # 100+200
```

Out[57]: 300

```
In [59]: n1=float(input('enter the number1:')) # int('100')
n2=float(input('enter the number2:')) # int('200')
```

```
n1+n2 #
```

Out[59]: 300.0

```
In [65]: n1=int(input('enter the number1:')) # int('100.5')
n2=int(input('enter the number2:')) # int('200')
n1+n2 # 100+200
```

```
-----
ValueError                                Traceback (most recent call last)
Cell In[65], line 2
      1 n1=int(input('enter the number1:')) # int('100.5')
----> 2 n2=int(input('enter the number2:')) # int('200')
      3 n1+n2

ValueError: invalid literal for int() with base 10: '200.5'
```

```
In [ ]: float('10') # 10.0
float('10.5') # 10.5
int('10') # 10
int('10.5') # fa
```

### eval

```
In [70]: eval(input())
```

Out[70]: 100.5

```
In [76]: n1=eval(input('enter the number1:')) # eval('100.5')
n2=eval(input('enter the number2:')) # eval('200')
n1+n2 # 100.5+200
```

Out[76]: 300.5

```
In [ ]: int('100.5') # error
float('100.5')
```

```
In [ ]: # Q1) Wap ask the user enter two numbers from keyboard find the multiplication
# Q2) Wap ask the user enter 3 numbers find the average
# Q3) Wap ask the user enter a bill amount and tip value calculate totalbill
# Q4) Wap ask the user find the area of circle
#      formulae: pi*r*r
# Q5) Wap ask the user find the area of right angle traingle
#      formula : 0.5*b*h
# Q6) Wap ask the user eneter amount in dollars
#      convert into rupees 1$=80rs
#      dollars=eval(input('enter the amount in dollars'))
# Q7) Wap ask the user enter weight in kgs and convert into pounds
#      1kg=2.2pounds
# Q8) Wap ask the user enter bill amount and tip percentage
#      calculate the total bill
```

```
In [78]: n1=eval(input('enter the n1:'))
n2=eval(input('enter the n1:'))
n3=eval(input('enter the n1:'))
avg=(n1+n2+n3)/3
avg1=round(avg,2)
print(f'the average of {n1},{n2} and {n3} is: {avg1}')
```

the average of 10,11 and 34 is: 18.33

```
In [80]: bill_amount=eval(input('enter the bill amount:'))
tip_amount=eval(input('tip amount'))
total_amount=bill_amount+tip_amount
print(f'the total amount is:{total_amount}')
```

the total amount is:1100

```
In [82]: bill_amount=eval(input('enter the bill amount:'))
tip_per=eval(input('enter the tip perc'))
tip_amount=bill_amount*tip_per/100
total_amount=bill_amount+tip_amount
print(f'the total amount is:{total_amount}')
```

the total amount is:2400.0

```
In [84]: pi=3.14
radius=eval(input('enter the radius'))
area_of_circle=pi*radius*radius
print(f'the area of circle is: {area_of_circle}')
```

the area of circle is: 7850.0

```
In [86]: base=eval(input('enter the base:'))
height=eval(input('enter the height'))
area_of_traingle=0.5*base*height
print(f'the area_of_traingle is:{area_of_traingle}')
```

the area\_of\_traingle is:100.0

```
In [90]: n1=eval(input('Enter number1 :')) # string 2
n2=eval(input('Enter number2 :')) # int 4
mul=n1*n2 # '2'*4
print(f'Number1 is {n1}. Number2 is {n2}. Multiplication is {mul}')
```

Number1 is 10. Number2 is 20. Multiplication is 200

```
In [94]: n1=eval(input('Enter amount in dollars:'))
INR=n1*80
'---$ amount is: --*-----rs'
print(f'{n1}$ amount is: {n1}*{80}={INR}rs')
```

5\$ amount is: 5\*80=400rs

```
In [ ]: 'conversion of 60kgs in pounds is: 60*2.2=132pounds'
```