

Input and Output in Python :

- Input() □ is used to read input in python. When we read input it is always treated as string type only.

Ex: x=input(" enter Something : ")

>>>type(x) // <class 'str'> whatever data we provide it is treated as string only.

To convert we need to use conversion functions like int(), float(),bool() etc.

Ex : x=int(input(" enter first Number :"))

y=int(input(" enter Second Number :"))

print(" The sum is : ",x+y)

(or)

print("the sum:", int(input(" enter first Number :"))+ int(input(" enter Second Number :")))

Ex 2 : Read employee data from keyboard eno, ename, esal, eaddr ,married and print that data.

eno=int(input(" Enter Employee Number :"))

ename=input(" Enter Employee Name :")

esal=float(input(" Enter Employee Salary :"))

eaddr=input(" Enter Employee Address :")

emstatus=bool(input(" Enter Employee Marital Status : [True / False]"))

print(" Please Confirm Information)

print("Employee Number :", eno)

print("Employee Nname :", ename)

print("Employee Salary :", esal)

print("Employee Address :", eaddr)

print("Employee Married? :",emstatus)

How to read multiple values from the keyboard in a single line :

Ex 1 :

input(" Enter 2 numbers :")

10 20 // split input separated by space, split() function split input separated by space .

a,b = [int(x) for x in input(" Enter 2 numbers :").split()]

print("The Product is : ", a*b)

Ex 2 : read 2 float values from keyboard which are separated by , and find their sum

a,b = [float(x) for x in input(" Enter 2 float Values :").split(',')]

print("The Sum is : ", a+b)

Ex 3 : read 4 int values from keyboard which are separated by : and find their sum

a,b,c,d = [int(x) for x in input(" Enter 4 int Values :").split(':')]

print("The Sum is : ", a+b+c+d)

eval(): function

```
x=eval("10+20+30") // takes string value and evaluate to corresponding data type
print(x)    // 60
```

Ex 1: program to evaluate an expression , 10+30-40*30/3%4

```
e=input( " Enter some Expression :")
res=eval(e)
print("The Result is : ",res)
```

Ex 2: eval convert data into internal data that we provide

```
x=input("Enter some Data:")    // [10, 20, 30]
print(type(x))                // < class 'str'>
x=eval(input("Enter some Data:")) // [10, 20, 30]
print(type(x))                // < class 'list'>
for x1 in x:
    print(x1)
```

Ex 3: eval convert what ever may be the input data convert it to its internal datatype

```
a,b,c=[ eval(x) for x in input("Enter 3 values :").split(',') ]    // 10,10.5,True
print(type(a))                // < class 'int'>
print(type(b))                // < class 'float'>
print(type(c))                // < class 'bool'>
```

```
x=eval(input("Enter some Data:")) // [10, 20, 30]
print(type(x))                // < class 'list'>
for x1 in x:
    print(x1)
```

Command Line Arguments:

Argument passed from command prompt

```
>>>py test.py 10 20 30 40 50
```

By using predefined variable 'argv' we can access command line arguments

'argv' is list type. It is in 'sys' module. Module is a group of variable, functions and classes.

```
from sys import argv
```

```
print(type(argv))
```

```
print(argv)                // ['test.py', '10', '20', '30' ] argv[0] is name of the file
```

```
print(argv[1:])            // [ '10','20','30']
```

```
print(argv[1]) // 10
```