

input() function allows a user to insert a value into a program

```
i = input()
print(i)
```

Console
Hello Sajeed
Hello Sajeed

```
i = input("Enter your Name: ")
print(i)
```

Console
Enter your Name: Sajeed
Sajeed

```
n = int(input("Enter any Number: "))
print(n)
```

Console
Enter any Number: 10
10

Enter any Number: Ten
ValueError: invalid literal for int() with base 10: 'Ten'

```
l = [input("Enter a list of elements: ")]  
print(l)  
print(type(l))
```

```
Enter a list of elements: 1,2,3,4,5  
['1,2,3,4,5']  
<class 'list'>
```

```
s = {input("Enter a set of elements: ")}  
print(s)  
print(type(s))
```

```
Enter a set of elements: 1,2,3,4,5  
{'1,2,3,4,5'}  
<class 'set'>
```

```
t = (input("Enter a tuple of elements: "))  
print(t)  
print(type(t))
```

```
Enter a tuple of elements: 1,2,3,4,5  
1,2,3,4,5  
<class 'str'>
```

```
d = {  
    1 : input("Enter a Number: "),  
    2 : float(input("Enter a Float Value: "))  
}  
print(d)  
print(type(d))
```

```
Enter a Number: 10  
Enter a Float Value: 10.0  
{1: '10', 2: 10.0}  
<class 'dict'>
```

```
t = tuple(input("Enter a Tuple: "))  
print(t)  
print(type(t))
```

```
Enter a Tuple: 123456  
('1', '2', '3', '4', '5', '6')  
<class 'tuple'>
```

eval() function parses the expression argument and evaluates it as a python expression

eval() function is mostly used in situations or applications which need to evaluate mathematical expressions

```
any = input("Enter a Any Type: ")
print(any)
e = eval(any)
print(type(e))
```

```
Enter a Any Type: {1,2,3,4,5}
{1,2,3,4,5}
<class 'set'>
```

```
Enter a Any Type: 1,2,3,4,5
1,2,3,4,5
<class 'tuple'>
```

```
Enter a Any Type: [1,2,3,4,5]
[1,2,3,4,5]
<class 'list'>
```

```
Enter a Any Type: "Sajeed"
"Sajeed"
<class 'str'>
```

```
Enter a Any Type: 10j
10j
<class 'complex'>
```

Diff bw input() and eval()

input() takes the user input,
but when the user enters an integer as an input the input function returns a string,
but in the case of eval() it will evaluate the returned value from a string to an integer

```
input = input("Enter any number:")  
print(input)  
print(type(input))
```

```
Enter any number:10+10  
10+10  
<class 'str'>
```

```
eval = eval(input("Enter any number: "))  
print(eval)  
print(type(eval))
```

```
Enter any number: 10+10  
20  
<class 'int'>
```

Enter Dict

```
d = {  
    1: input("Enter a Number: "),  
    2: float(input("Enter a Float Value: "))  
}  
print(d)  
print(type(d))
```

Console:

```
Enter a Number: 10  
Enter a Float Value: 20  
{1: '10', 2: 20.0}  
<class 'dict'>
```

Enter List

```
# list  
l1 = list([input('Enter value a: '), input('Enter value b: ')])  
print(l1, type(l1))
```

Console:

```
Enter value a: 10  
Enter value b: 20  
['10', '20'] <class 'list'>
```

Enter Tuple

```
# dict  
d1 = tuple([input('Enter value a: '), input('Enter value b: ')])  
print(d1, type(d1)) # ('10', '20') <class 'tuple'>
```

Console:

```
Enter value a: 10  
Enter value b: 20  
('10', '20') <class 'tuple'>
```