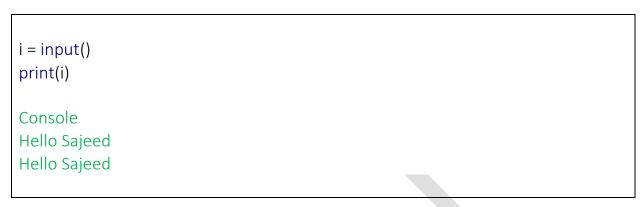
input() function allows a user to insert a value into a program



```
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'
```

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

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'>
```