

# Datatypes

*Integer, Float, String, Boolean, \*Complex*

```
In [5]: 1+1          #basic operations
```

```
Out[5]: 2
```

```
In [6]: 4*5
```

```
Out[6]: 20
```

```
In [7]: 10/2
```

```
Out[7]: 5.0
```

```
In [8]: 10%2
```

```
Out[8]: 0
```

```
In [9]: type(1)          #type(),used to find the Datatype
```

```
Out[9]: int
```

```
In [11]: type("Hello")   #string
```

```
Out[11]: str
```

```
In [1]: type(1.6)        #float
```

```
Out[1]: float
```

```
In [2]: type(True)       #bool
```

```
Out[2]: bool
```

```
In [3]: a = 3+4j          #complex  
type(a)
```

```
Out[3]: complex
```

```
In [14]: "Hello"
```

```
Out[14]: 'Hello'
```

```
In [16]: type("Hello")   # Double quote and single quote are same thing  
type('Hello')
```

```
Out[16]: str
```

```
In [6]: marvel_super_hero = "Iron Man"           #variable
        print(marvel_super_hero)
```

Iron Man

```
In [3]: marvel_super_hero = "Captain America"    #variables names can be changed
        print(marvel_super_hero)
```

Captain America

```
In [5]: hero1,hero2,hero3 = "Iron Man", "Captain America", "Bat Man"    #Multiple variable
        print(hero1)
        print(hero2)
        print(hero3)
```

Iron Man  
Captain America  
Bat Man

```
In [7]: x=y=z=23
        print(x)
        print(y)
        print(z)
```

23  
23  
23

## Various ways of printing

```
In [17]: print("hello")
```

hello

```
In [18]: first_name='Shantanu'
        last_name='Mishra'
```

```
In [19]: print("My First name is {} and my Last name is {}".format(first_name,last_name))
```

My First name is Shantanu and my Last name is Mishra

```
In [20]: print("My First name is {first} and my Last name is {last}".format(first=first_name, last=last_name))
```

My First name is Shantanu and my Last name is Mishra

```
In [21]: len('Shantanu')           #Used to find the Lenght
```

```
Out[21]: 8
```

```
In [23]: len('123456789')
```

```
Out[23]: 9
```

## Input Function

```
In [14]: num1 = input("Enter the first number: ")
        num2 = input("Enter the second number: ")
        sum = num1 + num2
        print(sum)           # Here it will take input as string by default
```

```
Enter the first number: 23
Enter the second number: 34
2334
```

```
In [15]: num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))
sum = num1 + num2
print(sum)
```

```
Enter the first number: 10
Enter the second number: 20
30
```

```
In [16]: num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))
sum = num1 + num2
print("The Sum of the numbers are {}".format(sum))
```

```
Enter the first number: 23
Enter the second number: 34
The Sum of the numbers are 57
```

```
In [21]: # Changing the data type in python -> Typecasting
num = 5
print(type(num))
print(float(num))
```

```
<class 'int'>
5.0
```