

In [1]: `2+2`

Out[1]: 4

In [2]: `numeric=int(input("Enter a Number"))`

Enter a Number4

In [3]: `numeric`

Out[3]: 4

Creating a module for sorting data from users

In [4]:

```
def data(N):  
    user_data=[]  
    for i in range (0,N):  
        numeric=int(input("Enter a Number"))  
        user_data.append(numeric)  
    return user_data
```

In [5]: `data(4)`

Enter a Number1
Enter a Number2
Enter a Number3
Enter a Number4

Out[5]: [1, 2, 3, 4]

In []:

Module to create Addition

- function
- logical
- return

In [6]:

```
def addition(a,b):  
    c=a+b  
    return c
```

Simple Testing

```
In [7]: addition(5,5)
```

```
Out[7]: 10
```

Module to create subtraction

- function
- logical
- return

```
In [8]: def subtraction(a,b):  
        c=a-b  
        return c
```

Simple Testing

```
In [9]: subtraction(6,5)
```

```
Out[9]: 1
```

Module to create Multiplication

- function
- logical
- return

```
In [10]: def multiplication(a,b):  
         c=a*b  
         return c
```

Simple Testing

```
In [11]: multiplication(5,5)
```

```
Out[11]: 25
```

Module to create Division

- function
- logical
- return

```
In [12]: def division(a,b):  
         c=a/b  
         return c
```

Simple testing

```
In [13]: division(5,5)
```

```
Out[13]: 1.0
```

Create a class

```
In [14]: class basic_calculator():  
         def addition(a,b):  
             c=a+b  
             return c  
  
         def subtraction(a,b):  
             c=a-b  
             return c  
  
         def multiplication(a,b):  
             c=a*b  
             return c  
  
         def division(a,b):  
             c=a/b  
             return c
```

```
In [15]: calculator.multiplication(5,2)
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-15-5eb117a3fe03> in <module>  
----> 1 calculator.multiplication(5,2)  
  
NameError: name 'calculator' is not defined
```

Prompt the user for the operator(-, + , * , /)

```
In [ ]: user_operator=input("Enter the any operator name given in bracket(add, sub, mul,
```

```
In [ ]: user_operator.lower()
```

```
In [ ]: def Operator():
    user_operator=input("Enter the any operator name given in bracket(add, sub, m
    if user_operator.lower()=='add':
        print('Successfully Added')
        print(basic_calculator.addition(a,b))
    elif user_operator.lower()=='sub':
        print('Successfully Subtracted')
        print(basic_calculator.subtraction(a,b))
    elif user_operator.lower()=='mul':
        print('Successfully Multiplied')
        print(basic_calculator.multiplication(a,b))
    elif user_operator.lower()=='div':
        print('Successfully Divided')
        print(basic_calculator.division(a,b))
    else:
        print("The input is not vaild Re-Run The Program")
```

Alpha Version of application

```
In [16]: Data_from_function=data(2)
Operator(Data_from_function[0],Data_from_function[1])
```

Enter a Number20

Enter a Number100

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-16-ca522728ed17> in <module>
      1 Data_from_function=data(2)
----> 2 Operator(Data_from_function[0],Data_from_function[1])

NameError: name 'Operator' is not defined
```

In []: