

PYTHON FUNCTION

creating a function

- In python a function is defined using the def keyword:

```
In [1]: def my_function():  
        print("hello from a function")
```

Calling a Function

```
In [2]: def my_function():  
        print("Hello from a function")  
  
        my_function()
```

Hello from a function

```
In [3]: def nit():  
        print("Hello World!")  
        print("Python is a dynamin programing language")  
        print("Python is a high level language")  
        print("Python was developed by Guido Van Rosssum")  
        nit()
```

Hello World!
Python is a dynamin programing language
Python is a high level language
Python was developed by Guido Van Rosssum

```
In [7]: def placement():  
        print("hello")  
        print("A function is a block of code")  
        print("Function can return a data as result")  
  
        placement() # call the 1 function many time  
        placement() # call the same fun 2 time  
        placement() # call the same function 3 time
```

hello
A function is a block of code
Function can return a data as result
hello
A function is a block of code
Function can return a data as result
hello
A function is a block of code
Function can return a data as result

```
In [11]: def School(): # create the function
          print("Welcome")
          print("How are you")
          print("Good morning")
          School() # call the function

          def College():
              print("Python have a reach librarys")
              print("python is a object oriented programing language")
              print("Python is an portable")
          College()
```

Welcome
How are you
Good morning
Python have a reach librarys
python is a object oriented programing language
Python is an portable

```
In [12]: def number():
          print("1")
          print("2")
          print("3")
          print("4")
          print("5")

          def letter():
              print("A")
              print("B")
              print("C")
              print("D")

          number()

          letter()
```

1
2
3
4
5
A
B
C
D

```
In [15]: def add(x,y): # create the function using parameter
          return x + y

          print(add(2,3)) # we passed the function Argument
```

5

```
In [16]: def mul(x,y): # we define a parameter

          c = x * y
```

```
print(c)

mul(2,3) # we passed the argument
```

6

```
In [19]: def even_no(number):

        if number % 2 == 0:
            print("Number is even")

        else:
            print("Number is odd")

        even_no(44)
```

Number is even

```
In [24]: def prime(number):    # check the number is prime or not

        for i in range(2,number):
            if number % i == 0:
                return False
        return True

        prime(13)
```

Out[24]: True

```
In [31]: def leap_year(number):

        if (number % 4 == 0 and number % 100 !=0) or (number % 400 == 0):
            return True
        else:
            return False

        print(leap_year(2024) )
        print(leap_year(2021))
```

True

False

```
In [34]: def Calculation(no1,no2): # perform the calculation of two

        add = no1 + no2
        return add

        no1 = int(input("enter the number 1:"))
        no2 = int(input("enter the number 2:"))

        print("Addiction is:",Calculation(no1,no2))
```

Addiction is: 30

```
In [35]: def add_sub(x,y):  
         c = x + y  
         d = x - y  
         return c, d  
  
         result = add_sub(2,2)  
  
         print(result)  
         print(type(result))
```

```
(4, 0)  
<class 'tuple'>
```

```
In [39]: def print_number(number):  
         for i in range(number):  
             print(i)  
  
         return i  
  
         print(print_number(10))
```

```
0  
1  
2  
3  
4  
5  
6  
7  
8  
9  
9
```

```
In [42]: def add_sub(x,y):  
         c = x + y  
         d = x - y  
         return c,d  
  
         result1,result2 = add_sub(5,4)  
         print(result1,result2)  
         print(type(result1))  
         print(type(result2))
```

```
9 1  
<class 'int'>  
<class 'int'>
```

```
In [51]: def average(number1,number2):  
         avg = (number1 + number2) / 2  
         return avg  
  
         number1 = int(input("Enter the number 1:"))  
         number2 = int(input("Enter the second number"))  
  
         print("Average is :",average(number1,number2))
```

Average is : 15.0

In []: