

```
In [1]: def ratna():  
        print("Hello,Welcome")  
        ratna()
```

Hello,Welcome

```
In [3]: # No parameter , no return  
def add():  
    a=10  
    b=20  
    print(a+b)  
add()
```

30

```
In [5]: # parameter and no return  
def add(a,b):  
    print(a+b)  
add(5,7)
```

12

```
In [7]: # no parameter but return  
def get_value():  
    return 100  
x = get_value()  
print(x)
```

100

```
In [9]: # parameter and return  
def multiply(a,b):  
    return a*b  
result = multiply(4,5)  
print(result)
```

20

```
In [13]: # function default parameter  
def ratna(name="Student"):  
  
    print("Hello",name)
```

```
ratna()  
ratna("Smruti")
```

Hello Student
Hello Smruti

```
In [15]: x = 10 #global  
def demo():  
    y = 20 #local  
    print(x)  
    print(y)  
demo()
```

10
20

```
In [17]: def ratna():  
    print('hello')  
    print('good morning')
```

```
In [19]: def ratna():  
    print('hello')  
    print('good morning')  
    ratna() # im just calling fuc
```

hello
good morning

```
In [21]: def ratna():  
    print('hello')  
    print('good morning')  
    ratna() # call multiple times  
def ratna():  
    print('hello')  
    print('good morning')  
    ratna()
```

hello
good morning
hello
good morning

```
In [23]: def ratna():  
        print('hello')  
        print("good")  
        ratna()  
        ratna()
```

hello
good
hello
good

```
In [25]: def ratna():  
        print("hey")  
        print("how are you")  
        ratna()  
        print()  
        ratna()
```

hey
how are you

hey
how are you

```
In [27]: def add(x,y):  
        c= x+y  
        print(c)  
        add(5,6)
```

11

```
In [29]: def add(x,y,z):  
        c=x+y+z  
        print(c)  
        add(1,4,5)
```

10

```
In [33]: def ratna():  
        print("hello")  
        print("how have u been")  
        ratna()  
        def add(x,y):
```

```
c= x+y
print(c)
add(5,4)
# you can create multiple fuc and call many times
```

```
hello
how have u been
9
```

```
In [35]: def ratna():
          print("hello")
          print("how have u been")

          def add(x,y):
              c= x+y
              print(c)

          def sub(x,y,z):
              d= x-y-z
              print(d)
          ratna()
          add(5,4)
          sub(10,2,5)
```

```
hello
how have u been
9
3
```

```
In [37]: def ratna():
          print("hello")
          print("ratna calling u")
          ratna()
          def add(x,y):
              c=x+y
              return c
          result = add(4,5)
          print(result)
```

```
hello
ratna calling u
9
```

```
In [41]: def add_sub(x,y):  
        c = x+y  
        d= x-y  
        return c,d  
add_sub(4,5)
```

Out[41]: (9, -1)

```
In [43]: def add_sub(x,y): # what if i want to return 2 values add_sub & i want to return 2 values & function can accept multi  
        c= x+y  
        d= x-y  
        return c, d  
  
result = add_sub(4,5)  
  
print(result)  
print(type(result))  
  
(9, -1)  
<class 'tuple'>
```

```
In [45]: def update():  
        x=8  
        print(x)  
        update()
```

8

```
In [47]: def update():  
        x=8  
        print(x)  
        update(8)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[47], line 4  
      2     x=8  
      3     print(x)  
----> 4     update(8)  
  
TypeError: update() takes 0 positional arguments but 1 was given
```

```
In [49]: def update(x):  
         x=8  
         print(x)  
         update(100)
```

8

```
In [51]: def update(x):  
         x= 8  
         print(x)  
         update(10)
```

8

```
In [53]: def update(x):  
         x = 8  
         print(x)  
  
         a = 10  
         update(a)  
         print(a)
```

8

10

```
In [57]: def update(x):  
         x = 8  
         #print(x)  
  
         a = 10  
         update(a)  
         print(a) # this print will update 8 to 5
```

10

```
In [ ]:
```