

```
In [1]: def am9():
    print('good morning guys')
```

```
In [2]: def am9():
    print('good morning guys')
am9()
```

```
good morning guys
```

```
In [3]: def greet():
    print('hello')
    print('good morning')
```

```
In [4]: def greet():
    print('hello')
    print('good morning')
greet()
```

```
hello
good morning
```

```
In [5]: def greet():
    print('hello')
    print('good morning')
greet()
```

```
def greet():
    print('hello')
    print('good morning')
greet()
```

```
def greet():
    print('hello')
    print('good morning')
greet()
```

```
hello
good morning
hello
good morning
hello
good morning
```

```
In [6]: def greet():
    print('hello good morning boss')

greet()
```

```
hello good morning boss
```

```
In [7]: def greet():

    print('hello good morning boss')
greet()

greet()

greet()
```

```
greet()
```

```
hello good morning boss
hello good morning boss
hello good morning boss
hello good morning boss
```

In [8]:

```
def add(x,y):# formal argument
    c = x+y
    print(c)
```

```
add(5,6,7,8)# positional argument
```

**TypeError**

Traceback (most recent call last)

Cell In[8], line 5

```
2     c = x+y
3     print(c)
----> 5 add(5,6,7,8)
```

**TypeError:** add() takes 2 positional arguments but 4 were given

```
def add(x,y): c = x+y print(c) add(8,6)
```

In [11]:

```
def add(x,y,z):
    c=x+y+z+m
    print(c)
add(1,4,5,)
```

**NameError**

Traceback (most recent call last)

Cell In[11], line 4

```
2     c=x+y+z+m
3     print(c)
----> 4 add(1,4,5,)
```

Cell In[11], line 2, in add(x, y, z)

```
1 def add(x,y,z):
----> 2     c=x+y+z+m
3     print(c)
```

**NameError:** name 'm' is not defined

In [12]:

```
def add(x,y,z,m):
    c=x+y+z+m
    print(c)
add(1,4,5,9)
```

19

In [13]:

```
def greet():
    print('hello')
    print('good morning')
greet()
```

```
hello
good morning
```

In [14]:

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

```
    print(c)
add(5,9)
```

14

```
In [15]: def greet():
    print('hello')
    print('good morning')
greet()

def add(x,y):
    c = x+y
    print(c)
add(5,7)
```

```
hello
good morning
12
```

```
In [16]: def greet():
    print('hello')
    print('good morning')
def add(x,y):
    c = x+y
    print(c)

add(5,6)
greet()
```

```
11
hello
good morning
```

```
In [17]: def greet():
    print('hello')
    print('good noon')

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

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

```
hello
good noon
9
8
```

```
In [18]: def add_sub(x,y):
    c = x+y
    d = x-y
    print(c)
    print(d)

add_sub(10,5)
```

```
15
5
```

```
In [19]: def add_sub(x,y):
    c = x+y
    d = x-y
    return c,d

add_sub(10,5)
```

```
Out[19]: (15, 5)
```

```
In [20]: def add_sub(x,y):
    c= x+y
    d= x-y
    return c, d

result = add_sub(5,4)

print(result)
```

```
(9, 1)
```

```
In [22]: def add_sub(x,y):
    c=x+y
    d= x-y
    return c, d
result1,result2 = add_sub(5,4)
print(result1, result2)
```

```
9 1
```

```
In [23]: def add(x,y):
    c = x+y
    print(c)
add(5,6)
```

```
11
```

## FORMAL ARGUMENT & ACTUAL ARGUMENT

```
In [24]: def person(name,age):
    print(name)
    print(age)

person('nit',23,34)
```

```
-----
TypeError                                     Traceback (most recent call last)
Cell In[24], line 5
      2     print(name)
      3     print(age)
----> 5 person('nit',23,34)
```

```
TypeError: person() takes 2 positional arguments but 3 were given
```

```
In [25]: def person(name,age):
    print(name)
    print(age)

person('nit',23)
```

nit  
23

```
In [26]: def person(name,age):
    print(name)
    print(age)

person(23,'nit')
```

23  
nit

```
In [35]: def person(name,age):
    print(name)
    print(age+1)

person(23,'nit')
```

23

---

### TypeError

Traceback (most recent call last)

```
Cell In[35], line 5
      2     print(name)
      3     print(age+1)
----> 5 person(23,'nit')
```

```
Cell In[35], line 3, in person(name, age)
```

```
  1 def person(name,age):
  2     print(name)
----> 3     print(age+1)
```

**TypeError:** can only concatenate str (not "int") to str

## Key Argument

```
In [28]: def person (name,age):
    print(name)
    print(age+1)

person(age=23, name='nit')
```

nit  
24

```
In [ ]: def person(name,age):
    print(name)
    print(age+1)

person(age1=23, name='nit')
```

```
In [30]: def person(name,age1):
    print(name)
    print(age1+1)

person(age1=23, name='nit')
```

nit

24

```
In [32]: def person(name,age,city):
    print(name)
    print(age+1)
    print(city)

person(age=22, name='NIT', city = 'bid')
```

NIT

23

bid

```
In [33]: def person(name, age=18):
    print(name)
    print(age)

person('nit', 24)
```

nit

24

In [ ]:

In [ ]: