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

In [4]:
```
def am9():
    print('good morning team')
am9()
```

```
good morning team
```

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

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

```
hello
good morning
```

In [7]:
```
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 [8]:
```
def greet():
    print('hello good morning boss')
greet()
```

```
hello good morning boss
```

In [9]:
```
def greet():
    print('hello boss good morning')
greet()
greet()
greet()
```

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

In [10]:
```
def add(x,y):
    c = x+y
    print(c)
add(5,6,7,8)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[10], line 4
      2     c = x+y
      3     print(c)
----> 4 add(5,6,7,8)

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

In [11]:
```
def add(x,y):
    c = x+y
    print(c)
add(5,6)
```

```
11
```

In [12]:
```
def add(x,y,z):
    c=x+y+z+m
    print(c)
add(1,4,5)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[12], line 4
      2     c=x+y+z+m
      3     print(c)
----> 4 add(1,4,5)

Cell In[12], 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 [13]:
```
def add(x,y,z,m):
    c=x+y+z+m
    print(c)
add(1,4,5,6)
```

```
16
```

In [14]:
```
def greet():
    print('hello')
    print('good mornig')
greet()
```

```
hello
good mornig
```

In [15]:
```
def add(x,y):
    c = x+y
    print(c)
add(5,6)
```

```
11
```

In [16]:
```
def greet():
    print('hello')
    print('good morning')
greet()

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

```
    print(c)
add(5,6)
```

```
hello
good morning
11
```

In [17]:
```
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 [21]:
```
def greet():
    print('hello')
    print('good morning')

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

def sub(x,y):
    d=x-y
    print(d)

greet()
add(5,8)
sub(11,90)
```

```
hello
good morning
13
-79
```

In [22]:
```
def add_sub(x,y):
    c=x+y
    d=x-y
    print(c)
    print(d)

add_sub(10,5)
```

```
15
5
```

In [23]:
```
def add_sub(x,y):
    c=x+y
    d=x-y
    return c,d

add_sub(10,5)
```

Out[23]: (15, 5)

In [24]:
```
def add_sub(x,y):
    c=x+y
    d=x-y
    return c,d

result = add_sub(5,4)
print(result)
```

```
(9, 1)
```

In [25]:
```
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 [26]:
```
def add(x,y):
    c=x+y
```

```
    print(c)

add(5,6)
```

```
11
```

FORMAL ARGUMENT & ACTUAL ARGUMENT

In [27]:
```
def person(name,age):
    print(name)
    print(age)

person('nit',23,34) #TypeError: person() takes 2 positional arguments but 3 were given
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[27], line 5
      2     print(name)
      3     print(age)
----> 5 person('nit',23,34)

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

positional argument

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

person('nit',23)
```

```
nit
23
```

In [29]:
```
def person(name,age):
    print(name)
    print(age)
```

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

```
23
nit
```

In [31]:
```
def person(name,age):
    print(name)
    print(age+1)

person(23,'nit') #TypeError: can only concatenate str (not "int") to str
```

```
23
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[31], line 5
      2     print(name)
      3     print(age+1)
----> 5 person(23,'nit') #TypeError: can only concatenate str (not "int") to str

Cell In[31], 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
```

keyword argument

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

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

```
nit
24
```

In [34]:
```
def person(name,age):
    print(name)
    print(age+1)
```

```
person(age1=23 , name='nit') #TypeError: person() got an unexpected keyword argument 'age1'
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[34], line 5
      2     print(name)
      3     print(age+1)
----> 5 person(age1=23 , name='nit') #TypeError: person() got an unexpected keyword argument 'age1'

TypeError: person() got an unexpected keyword argument 'age1'
```

In [35]:
```
def person(name,age1):
    print(name)
    print(age1+1)

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

```
nit
24
```

In [36]:
```
def person(name,age,city):
    print(name)
    print(age+1)
    print(city)

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

```
nit
24
hyd
```

default argument

In [37]:
```
def person(name,age=18):
    print(name)
    print(age)
person('nit',24)
```

```
nit
24
```