

可变参数

*param 参数放到元组

**param 参数放到字典

【操作】传递可变参数测试

```
def f1 (a, b, *c):
```

```
    print(a, b, c)
```

```
f1(8, 9, 19, 20)
```

```
def f2(a, b, **c):
```

```
    print(a, b, c)
```

```
f2(8, 9, name = 'gaoqi')
```

```
def f3(a, b, *c, **d):
```

```
    print(a, b, c, d)
```

```
f3(8, 9, 20, 30, name = 'gaoqi', age = 19)
```

```
# 8 9 (19, 20)
```

```
# 8 9 {'name': 'gaoqi'}
```

```
# 8 9 (20, 30) {'name': 'gaoqi', 'age': 19}
```

强制命名参数

在带星号的可变参数后面增加的参数，必须强制命名

【操作】强制命名参数的适应

```
def f_qiangzhi_mingming(*a, b, c):
```

```
    print(a, b, c)
```

```
f_qiangzhi_mingming(1, 2, b = 3, c = 4) # 强制命名
```

```
# (1, 2) 3 4
```