

1. What is the result of the code, and why?

```
>>> def func(a, b=6, c=8):  
print(a, b, c)  
>>> func(1, 2)
```

Ans: Result of the code is :

1 2 8

func uses the default value of c = 8 as declared and takes the given values 1,2 as a and b respectively.

```
In [1]: 1 def func(a, b=6, c=8):  
2         print(a, b, c)  
3         func(1, 2)  
1 2 8
```

2. What is the result of this code, and why?

```
>>> def func(a, b, c=5):  
print(a, b, c)  
>>> func(1, c=3, b=2)
```

Ans:

The interpreter ignores the order of the arguments passed in the function.

```
In [2]: 1 def func(a, b, c=5):  
2         print(a, b, c)  
3         func(1, c=3, b=2)  
4  
1 2 3
```

3. How about this code: what is its result, and why?

```
>>> def func(a, *pargs):  
print(a, pargs)  
>>> func(1, 2, 3)
```

Ans:

The result of the code is 1 (2,3).

*pargs lets you pass an unspecified number of arguments whose values are stored in a tuple.

```
In [3]: 1 def func(a, *pargs):  
2         print(a, pargs)  
3         func(1, 2, 3)  
1 (2, 3)
```

4. What does this code print, and why?

```
>>> def func(a, **kargs):  
print(a, kargs)  
>>> func(a=1, c=3, b=2)
```

Ans: The result of the code is 1 {'c': 3, 'b': 2}.

**kargs lets you pass unspecified number of arguments as key value pair that are stored in a dictionary.

```
In [4]: 1 def func(a, **kargs):  
2         print(a, kargs)  
3         func(a=1, c=3, b=2)  
1 {'c': 3, 'b': 2}
```

5. What gets printed by this, and explain?

```
>>> def func(a, b, c=8, d=5): print(a, b, c, d)  
>>> func(1, *(5, 6))
```

Ans:

The output of the code is 1 5 6 5

func expects 4 arguments, the value for a is specified, the function will expand *(5,6) as arguments for b and c and take the default value for d.

```
In [5]: 1 def func(a, b, c=8, d=5):
        2     print(a, b, c, d)
        3     func(1, *(5, 6))

1 5 6 5
```

6. what is the result of this, and explain?

```
>>> def func(a, b, c): a = 2; b[0] = 'x'; c['a'] = 'y'
```

```
>>> l=1; m=[1]; n={'a':0}
```

```
>>> func(l, m, n)
```

```
>>> l, m, n
```

Ans: The output of the code is 1, ['x'], {'a': 'y'}.

Func takes l,m,n as inputs and its modifies the values as l=1 ,m=['x'] and n={'a':'y'}

```
In [6]: 1 def func(a, b, c):
        2     a = 2; b[0] = 'x'; c['a'] = 'y'
        3     l=1; m=[1]; n={'a':0}
        4     func(l, m, n)
        5     l, m, n

Out[6]: (1, ['x'], {'a': 'y'})
```