

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

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

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

```
>>> func(1, 2)
```

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

```
func(2,4,5)
```

```
2 4 5
```

```
func(2)
```

```
2 6 8
```

```
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)
```

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

```
1 2 3
```

When we are calling function we are passing the arguments a = 1, b = 2 and c = 3. In the function definition the sequence of arguments are a, b, c. So output is 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)
```

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

```
1 (2, 3)
```

*pargs command print all the command line arguments that passed during running process. It returns in form of tuples.

```
def func(*pargs):  
    return pargs  
func(3,5,8,9)
```

```
(3, 5, 8, 9)
```

```
type((func(3,5,8,9)))
```

```
tuple
```

4. What does this code print, and why?

```
>>> def func(a, **kargs):
```

```
print(a, kargs)
```

```
>>> func(a=1, c=3, b=2)
```

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

```
1 {'c': 3, 'b': 2}
```

**kargs pass the arguments in key value format and it produce output in form of dictionary

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))
```

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

```
(1, 5, 6, 5)
```

Here a = 1 (by position) b = 5 and c = 6 by * name positional (8 is overwritten by 5) d = 5 (by default)

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
```

```
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
```

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

```
l=1, m = [1] = [b[0]] = ['x'], n = {'a': 0} = {'a': 'y'}
```