```
a)
```

```
0 def ins(e, ls):
1    yield [e, *ls]
2    if ls:
3         for i in ins(e, ls[1:]):
4         yield [ls[0], *i]
5 for i in ins(0, [1, 2, 3]):
6    print i
```

## imprime:

global	
рс	5
i	-

### 0 def ins(e, ls):

#### 1 yield [e, \*ls]

2 if ls:

3 for i in ins(e, ls[1:]):

4 yield [ls[0], \*i]

5 for i in ins(0, [1, 2, 3]):

6 print i

#### imprime:

global	
рс	5
i	-

ins	
рс	1
е	0
Is	[1, 2, 3]

```
0 def ins(e, Is):
    yield [e, *ls]
1
2
        if ls:
          for i in ins(e, ls[1:]):
3
4
             yield [ls[0], *i]
5 for i in ins(0, [1, 2, 3]):
6 print i
```

imprime: [0, 1, 2, 3]

global	
рс	6
i	[0, 1, 2, 3]

ins	
рс	1
е	0
Is	[1, 2, 3]

0 def ins(e, ls):

yield [e, \*ls]

2 if ls:

for i in ins(e, Is[1:]):yield [Is[0] \*i]

5 for i in ins(0, [1, 2, 3]):

6 print i

imprime: [0, 1, 2, 3]

global	
рс	5
i	-

ins	
рс	3
е	0
Is	[1, 2, 3]
i	-

## 0 def ins(e, ls): 1 yield [e, \*ls]

2 if ls:

3 for i in ins(e, ls[1:]):

yield [ls[0], \*i] 4

5 for i in ins(0, [1, 2, 3]):

6 print i

imprime: [0, 1, 2, 3]

global	
рс	5
i	-

ins	
рс	3
е	0
Is	[1, 2, 3]
i	-

ins	
рс	1
е	0
Is	[2, 3]

```
0 def ins(e, ls):
1     yield [e, *ls]
2     if ls:
3         for i in ins(e, ls[1:]):
4         yield [ls[0], *i]
5 for i in ins(0, [1, 2, 3]):
6     print i
```

imprime: [0, 1, 2, 3]

global		
	рс	5
	i	-

ins	
рс	4
е	0
Is	[1, 2, 3]
i	[0,2,3]

ins	
рс	1
е	0
Is	[2, 3]

```
0 def ins(e, ls):
1
    yield [e, *ls]
2
       if ls:
3
          for i in ins(e, ls[1:]):
4
             yield [ls[0], *i]
5 for i in ins(0, [1, 2, 3]):
6 print i
```

global	
рс	6
i	[1,0,2,3]

ins	
рс	4
е	0
Is	[1, 2, 3]
i	[0,2,3]

ins	
рс	1
е	0
Is	[2, 3]

0 def ins(e, ls):

1 yield [e, \*ls]

2 if ls:

# 3 for i in ins(e, ls[1:]): 4 yield [ls[0], \*i]

5 for i in ins(0, [1, 2, 3]):

6 print i

global	
рс	5
i	-

ins	
рс	3
е	0
Is	[1, 2, 3]
i	-

ins	
рс	3
е	0
Is	[2, 3]
i	-

0 def ins(e, ls):

#### 1 yield [e, \*ls]

2 if ls:

3 for i in ins(e, ls[1:]):

4 yield [ls[0], \*i]

5 for i in ins(0, [1, 2, 3]):

6 print i

global	
рс	5
i	-

ins	
рс	3
е	0
Is	[1, 2, 3]
i	-

ins	
рс	3
е	0
Is	[2, 3]
i	-

ins	
рс	1
е	0
Is	[3]

```
0 def ins(e, Is):
```

- 1 yield [e, \*ls]
- 2 if ls:
- 3 for i in ins(e, ls[1:]):

### 4 yield [ls[0], \*i]

5 for i in ins(0, [1, 2, 3]):

6 print i

global	
рс	5
i	-

ins	
рс	3
е	0
Is	[1, 2, 3]
i	-

ins	
рс	4
е	0
Is	[2, 3]
i	[0,3]

ins	
рс	1
е	0
Is	[3]

```
0 def ins(e, ls):
```

- 1 yield [e, \*ls]
- 2 if ls:
- 3 for i in ins(e,  $\underline{ls[1:]}$ ):

### 4 yield [ls[0], \*i]

5 for i in ins(0, [1, 2, 3]):

6 print i

global	
рс	5
i	-

ins	
рс	4
е	0
Is	[1, 2, 3]
i	[2,0,3]

ins	
рс	4
е	0
Is	[2, 3]
i	[0,3]

ins	
рс	1
е	0
Is	[3]

```
0 def ins(e, ls):
1     yield [e, *ls]
2     if ls:
3      for i in ins(e, ls[1:]):
4      yield [ls[0], *i]
5 for i in ins(0, [1, 2, 3]):
```

### 6 print i

imprime: [0, 1, 2, 3] [1,0,2,3] [1,2,0,3]

global	
рс	6
i	[1,2,0,3]

ins	
рс	4
е	0
Is	[1, 2, 3]
i	[2,0,3]

ins	
рс	4
е	0
Is	[2, 3]
i	[0,3]

ins	
рс	1
е	0
Is	[3]

## 0 def ins(e, ls): 1 yield [e, \*ls]

2 if ls:

for i in ins(e, ls[1:]): 3

yield [ls[0], \*i]

5 for i in ins(0, [1, 2, 3]):

6 print i

imprime: [0, 1, 2, 3] [1,0,2,3] [1,2,,0,3]

	1 [	
global		
	рс	5
	i	-

ins	
рс	3
е	0
Is	[1, 2, 3]
i	-

ins	
рс	3
е	0
Is	[2, 3]
i	-

ins	
рс	3
е	0
Is	[3]
i	-

ins	
рс	1
е	0
Is	0

## 0 def ins(e, ls): 1 yield [e, \*ls]

- 2 if ls:
- for i in ins(e, ls[1:]): 3
- yield [ls[0], \*i]
- 5 for i in ins(0, [1, 2, 3]):
- 6 print i

imprime: [0, 1, 2, 3] [1,0,2,3] [1,2,0,3] [1,2,3,0]

global	
рс	5
i	[1, 2, 3, 0]

ins	
рс	4
е	0
Is	[1, 2, 3]
i	[2, 3, 0]

ins	
рс	4
е	0
Is	[2, 3]
i	[3, 0]

ins	
рс	4
е	0
Is	[3]
i	[0]

ins	
рс	1
е	0
Is	0