

<+++++++ KEY ONE +++++>

```
int i; // int
int* q; // pointer(int)
int* a[10]; // array(10,pointer(int))
int* (*b[10])[10]; // array(10,pointer(array(10,pointer(int))))
int* ((*p)[10])[10]; // pointer(array(10,pointer(array(10,pointer(int)))))
```

```
i = 100; q = &i; a[1] = q; b[1] = &a; p = &b;
```

```
**(**(*p + 1)+1)
```

```
p : pointer(array(10,pointer(array(10,pointer(int)))))
```

```
<LOD, - , p>
```

```
*p : array(10,pointer(array(10,pointer(int))))
```

```
*p+1 : array(10,pointer(array(10,pointer(int))))
```

<LIT, - , 1>

<LIT, - , 1>

<MUL, - , ->

<ADD, - , >

__(*p+1) : pointer(array(10,pointer(int)))

<LODA, - , >

__(*p+1) : array(10,pointer(int))

__(*p+1)+1 : array(10,pointer(int))

<LIT, - , 1>

<LIT, - , 1>

<MUL, - , ->

<ADD, - , ->

__(*(*p+1)+1) : pointer(int)

<LODA, - , ->

****(**(*p+1)+1) : int**

<LODA, - , ->

<+++++ KEY TWO +++++>

int i; // int

int* q; // pointer(int)

int* a[10]; // array(10,pointer(int))

int* (*b[10])[10];//array(10,pointer(array(10,pointer(int))))

int* (*(p)[10])[10];//pointer(array(10,pointer(array(10,pointer(int)))))

i = 100; q = &i; a[1] = q; b[1] = &a; p = &b;

p[0][1][0][1][0]

p : pointer(array(10,pointer(array(10,pointer(int)))))

<LOD, - , p>

p[0] : array(10,pointer(array(10,pointer(int))))

<LIT, - , 0>

<LIT, - , 10>

<MUL, - , ->

<ADD, - , ->

p[0][1] : pointer(array(10,pointer(int)))

<LIT, - , 1>

<LIT, - , 1>

<MUL, - , ->

<ADD, - , ->

<LODA, -, ->

p[0][1][0] : array(10,pointer(int))

<LIT, - , 0>

<LIT, - , 10>

<MUL, - , ->

<ADD, - , ->

p[0][1][0][1] : pointer(int)

<LIT, - , 1>

<LIT, - , 1>

<MUL, - , ->

<ADD, - , ->

<LODA, -, ->

p[0][1][0][1][0] : int

<LIT, - , 0>

<LIT, - , 1>

```
<MUL, -, ->  
<ADD, -, ->  
<LODA, -, ->
```

```
<+++++++ KEY THREE +++++>
```

```
int i; // int  
int* q; // pointer(int)  
int* a[10]; // array(10,pointer(int))  
int* (*b[10])[10]; // array(10,pointer(array(10,pointer(int))))  
int* (*(p)[10])[10]; // pointer(array(10,pointer(array(10,pointer(int)))))
```

```
i = 100; q = &i; a[1] = q; b[1] = &a; p = &b;
```

```
*(p)[1][1]
```

```
p : pointer(array(10,pointer(array(10,pointer(int)))))
```

<LOD, - , p>

*p : array(10,pointer(array(10,pointer(int))))

(*p)[1] : pointer(array(10,pointer(int)))

<LIT, - , 1>

<LIT, - , 1>

<MUL, - , ->

<ADD, - , ->

<LODA, -, ->

__(*p)[1] : array(10,pointer(int))

(__(*p)[1])[1] : pointer(int)

<LIT, - , 1>

<LIT, - , 1>

<MUL, - , ->

<ADD, - , ->

<LODA, -, ->

((*p)[1])[1] : int

<LODA, -, ->