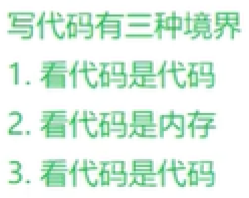
1.

```
int main()
{
 int a[5] = {1, 2, 3, 4, 5};
 int *ptr = (int *)(&a + 1); //&a+1指向5后面 跳过整个数组
 printf("%d,%d", *(a+1), *(ptr - 1));
 return 0;
}//2 5
```


写代码有三种境界
1. 看代码是代码
2. 看代码是内存
3. 看代码是代码

> 刚开始我看山是山、看海是海
> 后来我看山不是山、看海不是海
> 最后啊我看山还是山、看海还是海

2.

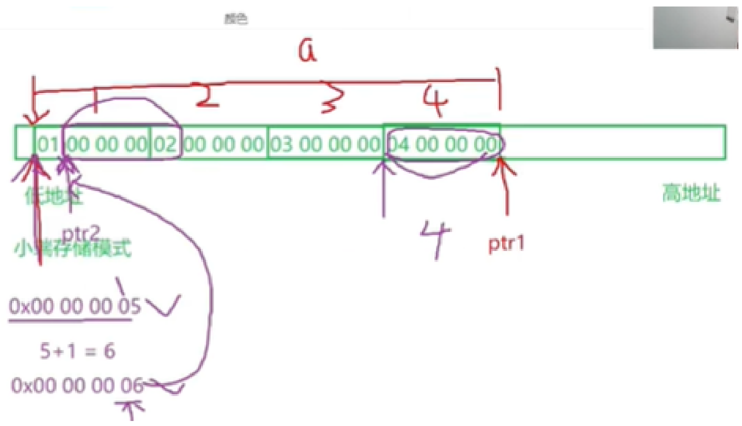
```
struct Test
{
 int Num;
 char* pcName;
 short sDate;
 char cha[2];
 short sBa[4];
}*p;

//假设p的值为0x100000 如下表达式的值是多少
//已知 结构体Test类型的变量大小是20个字节
int main()
{
 p = (struct Test)0x100000;
 printf("%p\n", p+0x1); 0x100000 + 20
 printf("%p\n", (unsigned long)p+0x1); //10485767 + 1 = 10485767十进制
 printf("%p\n", (unsigned int*)p+0x1); //0x100000 + 4
}

//0x00100014 0x00100001 0x00100004
```

3.

```c
int main()
{
 int a[4] = {1,2,3,4}; //小端模式 01000000 020000000 03000000 04000000
 int *ptr1 = (int *)(&a + 1); //0x4
 int *ptr2 = (int *)((int)a + 1); //0x20000000
 printf("%x, %x", ptr1[-1], *ptr2);
 return 0;
}
```

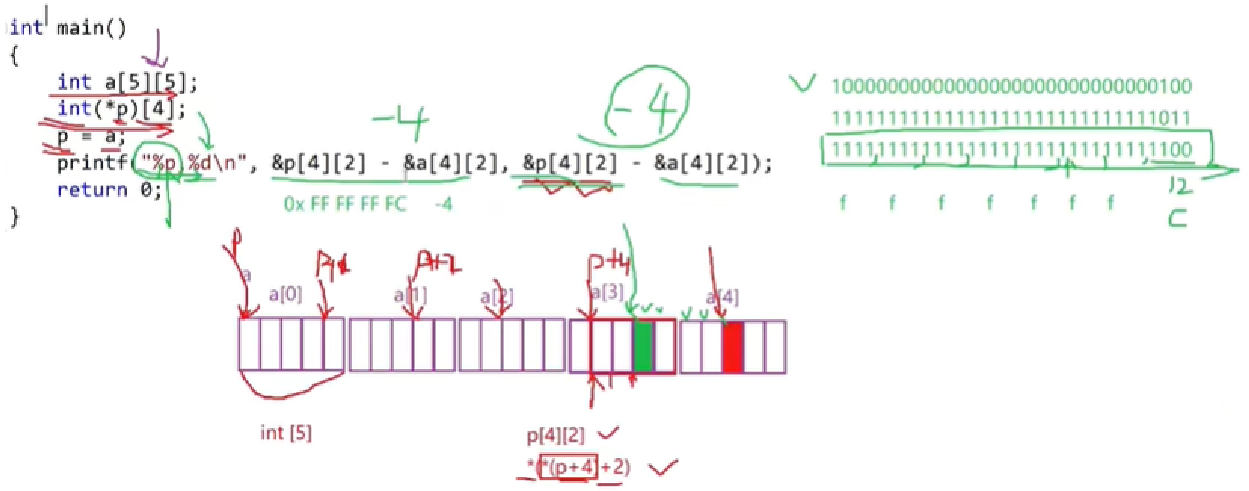


4.

```c
int main()
{
 int a[3][2] = { (0,1), (2,3), (4,5)}; //逗号表达式 {1, 3, 5}
 int *p;
 p = a[0];
 printf("%d", p[0]);
 return 0;
}//1
```

5.

```c
int main()
{
 int a[5][5];
 int (*p)[4];
 p = a;
 printf("p, %d" &p[4][2] - &a{4}[2], &p[4][2] - &a[4][2]);
 return 0;
} 0xff ff ff fc \ -4
```



```
int main()
{
    int a[5][5];
    int(*p)[4];
    p = a;
    printf("%p,%d\n", &p[4][2] - &a[4][2], &p[4][2] - &a[4][2]);
    return 0;
}
```

6.

```
int main()
{
 int aa[2][5] = {1,2,3,4,5,6,7,8,9,10};
 int *ptr1 = (int *)(&aa + 1); //跳过整个二维数组
 int *ptr2 = (int *)(*(aa+1)); //首元素也就是第一行的地址+1 跳到第二行首元素

 printf("%d,%d", *(ptr1 - 1), *(ptr2 - 1));
 return 0;
}//10 5
```

7.

```
int main()
{
 char *a[] = {"work", "at", "alibaba"}; //将首字符的地址放到a中
 char **pa = a;
 pa++;
 printf("%s\n", *pa);
 return 0;
} // at
```

8.

```
int main()
{
 char *c[] = {"ENTE", "NEW", "POINT", "FIRST"};
 char**cp[] = {c+3, c+2, c+1, c};
 char***cpp = cp;

printf("%s\n", **++cpp); //point
printf("%s\n", *--*++cpp + 3);
printf("%s\n", *cpp[-2] + 3);
 printf("%s\n", cpp[-1][-1] + 1);
 return 0;
}
```