

Static in C

```
1 void foo()  
2 {  
3     int a = 10;  
4     static int statica = 10;  
5  
6     a++;  
7     statica++;  
8  
9     printf("a = %d, sa = %d\n", a, statica);  
10 }  
11  
12  
13 int main()  
14 {  
15     int i;  
16  
17     for (i = 0; i < 10; ++i)  
18         foo();  
19 }  
20
```

C:\ccode\static1.exe

```
a = 11, sa = 11  
a = 11, sa = 12  
a = 11, sa = 13  
a = 11, sa = 14  
a = 11, sa = 15  
a = 11, sa = 16  
a = 11, sa = 17  
a = 11, sa = 18  
a = 11, sa = 19  
a = 11, sa = 20
```

Quiz

- What is the output?

```
1  int fun()  
2  {  
3      int count = 0;  
4      count++;  
5      return count;  
6  }  
7  
8  int main()  
9  {  
10     printf("%d ", fun());  
11     printf("%d ", fun());  
12     return 0;  
13 }
```

Prints 1 1

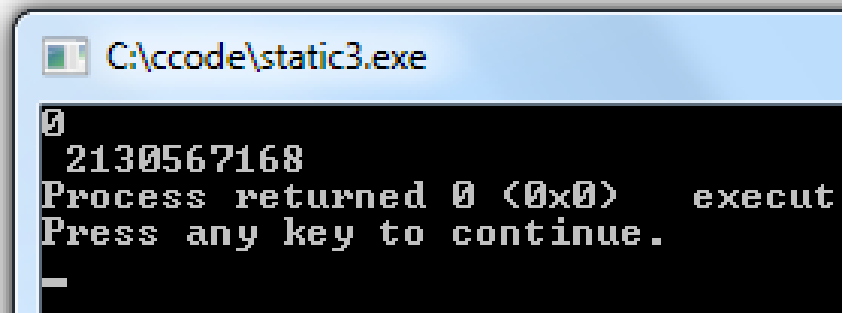
```
1  int fun()  
2  {  
3      static int count = 0;  
4      count++;  
5      return count;  
6  }  
7  
8  int main()  
9  {  
10     printf("%d ", fun());  
11     printf("%d ", fun());  
12     return 0;  
13 }
```

Prints 1 2

More about Static

- static variables are initialized to zero by default.

```
1 int main()  
2 {  
3     static int x;  
4     int y;  
5  
6     //static variable x is zero.  
7     printf("%d \n %d", x, y);  
8 }  
9
```



```
C:\ccode\static3.exe  
2130567168  
Process returned 0 (0x0) execut  
Press any key to continue.  
-
```