

```
1  #include <stdio.h>
2
3  // *** GLOBAL SCOPE ***
4
5  int main(void)
6  {
7      // *** LOCAL SCOPE OF main() begins ***
8
9      // variable declarations
10     // 'a' is a Local Variable. It is local to main() only.
11     int a = 5;
12
13     //function prototypes
14     void change_count(void);
15
16     //code
17     printf("\n");
18     printf("A = %d\n\n", a);
19
20     // local_count is initialized to 0.
21     // local_count = local_count + 1 = 0 + 1 = 1
22     change_count();
23
24     // Since, 'local_count' is an ordinary local variable of change_count(), it  ➤
25     // will NOT retain its value from previous call to change_count().
26     // So local_count is AGAIN initialized to 0
27     // local_count = local_count + 1 = 0 + 1 = 1
28     change_count();
29
30     // Since, 'local_count' is an ordinary local variable of change_count(), it  ➤
31     // will NOT retain its value from previous call to change_count().
32     // So local_count is AGAIN initialized to 0
33     // local_count = local_count + 1 = 0 + 1 = 1
34     change_count();
35
36     return(0);
37
38     // *** LOCAL SCOPE OF main() ends ***
39 }
40
41 // *** GLOBAL SCOPE ***
42
43 void change_count(void)
44 {
45     // *** LOCAL SCOPE OF change_count() begins ***
46
47     // variable declarations
48     // 'local_count' is a Local Variable. It is local to change_count() only.
49     int local_count = 0;
50
51     //code
52     local_count = local_count + 1;
```

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51     printf("Local Count = %d\n", local_count);
52
53     // *** LOCAL SCOPE OF change_count() ends ***
54 }
55
56 // *** GLOBAL SCOPE ***
57
```