

```
1  #include <stdio.h>
2
3  int main(void)
4  {
5      //function declarations
6      void SwapNumbers(int, int);
7
8      //variable declaration
9      int a;
10     int b;
11
12     //code
13     printf("\n\n");
14     printf("Enter Value For 'A' : ");
15     scanf("%d", &a);
16
17     printf("\n\n");
18     printf("Enter Value For 'B' : ");
19     scanf("%d", &b);
20
21     printf("\n\n");
22     printf("***** BEFORE SWAPPING *****\n\n");
23     printf("Value Of 'A' = %d\n\n", a);
24     printf("Value Of 'B' = %d\n\n", b);
25
26     SwapNumbers(a, b); // ***** ARGUMENTS PASSED 'BY VALUE' ... *****
27
28     printf("\n\n");
29     printf("***** AFTER SWAPPING *****\n\n");
30     printf("Value Of 'A' = %d\n\n", a);
31     printf("Value Of 'B' = %d\n\n", b);
32
33     return(0);
34 }
35
36 void SwapNumbers(int x, int y) // Value Of 'a' is copied into 'x' and value of 'b' is copied into 'y' ... swapping takes place between 'x' and 'y', not between 'a' and 'b' ...
37 {
38     //varibale declarations
39     int temp;
40
41     //code
42     printf("\n\n");
43     printf("***** BEFORE SWAPPING *****\n\n");
44     printf("Value Of 'X' = %d\n\n", x);
45     printf("Value Of 'Y' = %d\n\n", y);
46
47     temp = x;
48     x = y;
49     y = temp;
50 }
```

```
51     printf("\n\n");
52     printf("***** AFTER SWAPPING *****\n\n");
53     printf("Value Of 'X' = %d\n\n", x);
54     printf("Value Of 'Y' = %d\n\n", y);
55
56 }
57
58
```