

```
1 #include <cs50.h>
2 #include <stdio.h>
3
4 // include the prototype for function
5 void swap(int a, int b);
6
7 // this program will swap two values
8 // it also demonstrates how memory storage works
9 int main(void)
10 {
11     printf("Enter your first number: \n");
12     int x = GetInt();
13     printf("Enter your second number: \n");
14     int y = GetInt();
15     printf("x = %d and y = %d\n", x, y);
16     // use funtion to switch the values
17     swap(x,y);
18     // print to show the memory values of original x and y
19     printf("Original values of X: %d and Y:%d\n", x, y);
20 }
21
22 void swap(int a, int b)
23 {
24     int tmp = a;
25     a = b;
26     b = tmp;
27     printf("x = %d and y = %d\n", a, b);
28 }
```