

```
1 // Mr Minich
2 // Ch7DemoSwap
3
4 public class Ch7DemoSwap
5 {
6     public static void main (String [] args)
7     {
8         int num1 = 1;
9         int num2 = 2;
10
11         System.out.println ("Before the swap,\n num1 is " + num1 + " and num2 is " + num2);
12
13         Pair nemo = new Pair (num1, num2 );
14         nemo.swap ();
15
16         num1 = nemo.getX ();
17         num2 = nemo.getY ();
18
19         System.out.println ("\n\nAfter the swap,\n num1 is " + num1 + " and num2 is " + num2);
20
21         swap (num1, num2 );
22         System.out.println ("\n\nAfter trying to swap again,\n num1 is " + num1 + " and num2 is " + num2);
23
24     }
25
26     public static void swap (int a, int b) // passing by value, doesn't allow swap to occur
27     {
28         int temp = a;
29         a = b;
30         b = temp;
31     }
32 }
33
34 /*
35
36 public class Pair
37 {
38     private int x;
39     private int y;
40
41     public Pair (int a, int b)
42     {
43         x = a;
44         y = b;
45     }
46
47     public int getX ()
48     {
49         return x;
50     }
51 }
```

```
52     public int getY()
53     {
54         return y;
55     }
56
57     public void swap()
58     {
59         int temp = x;
60         x = y;
61         y = temp;
62     }
63
64 }
65
66 */
```