

Swap Two Numbers in C

Given two numbers **a** and **b**, the task is to swap their value with each other.

Example:

Input: **a** = 2, **b** = 3

Output: **a** = 3, **b** = 2

Input: **a** = "geeks", **b** = "for"

Output: **a** = "for", **b** = "geeks"

Approach

Let's consider common idea most people think but this idea is wrong: Assign value of **a** to variable **b**, then assign the value of **b** to variable **a**.

This approach is incorrect because it makes both variables identical in the first assignment only. When you assign value of **a** to **b**, you lose the original value of **a**, resulting in both variables having the same value.

The correct approach is to use a **temporary variable**.

1. Create a temporary variable **temp**.
2. Store the value of **a** in **temp**.
3. Assign the value of **b** to **a**.
4. Assign the value stored in **temp** to **b**.

Solution

C

```
1  #include <stdio.h>
2  int main()
3  {
4      int a, b;
5      scanf("%d %d", a, b);
6
7      int temp = a;
8      a = b;
9      b = temp;
10
11     printf("Value of a is %d \n", a);
12     printf("Value of b is %d", b);
13     return 0;
```

```
14 }
```

Input

4

5

Output

Value of a is 5

Value of b is 4