

S.No: 6	Exp. Name: Write a C program to Swap Two numbers with out using a Third variable	Date:2023-01-03
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Aim:

Write a program to **swap** two integer values without using a third variable.

During execution, the program should print the following message on the console:

Enter two integers :

For example, if the user gives the **input** as **99 89** :

Enter two integers : 99 89

Then the program should **print** the result as:

Before swapping a = 99, b = 89
After swapping a = 89, b = 99

Note: Use the **printf()** function with a **newline** character (**\n**) at the end.

Source Code:

Program311.c

```
// c program to swap two integer values without using a third variable
// author by naveena
// taught by faculty
// date:24/12/2022
// filename:numbersswapping.c
#include<stdio.h>
int main()
{
    int a,b;
    printf("Enter two integers: ");
    scanf("%d%d",&a,&b);
    printf("Before swapping a = %d, b = %d\n", a,b);
    a=a+b;b=a-b;a=a-b;
    printf("After swapping a = %d, b = %d\n", a,b);
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter two integers: 23 67
Before swapping a = 23, b = 67
After swapping a = 67, b = 23

Test Case - 2
User Output
Enter two integers: 99 89

Before swapping a = 99, b = 89
After swapping a = 89, b = 99

Test Case - 3
User Output
Enter two integers: 77 78
Before swapping a = 77, b = 78
After swapping a = 78, b = 77