

Aim:

Write a program to find the **reverse** of an integer number and check whether it is **Palindrome** or not.

At the time of execution, the program should print the message on the console as:

Enter an integer :

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

Enter an integer : 2014

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

The reverse of a given number : 4102
2014 is not a palindrome

If the input is given as **1221** then the result should be:

The reverse of a given number : 1221
1221 is a palindrome

Source Code:

Program421.c

```
#include<stdio.h>
int main()
{
    int num,rem,rev=0,num1;
    printf("Enter an integer : ");
    scanf("%d",&num);
    num1=num;
    while(num1!=0)
    {
        rem=num1%10;
        rev=rem+(rev*10);
        num1=num1/10;
    }
    if (num==rev)
    {
        printf("The reverse of a given number : %d\n",rev);
        printf("%d is a palindrome\n",num);
    }
    else
    {
        printf("The reverse of a given number : %d\n",rev);
        printf("%d is not a palindrome\n",num);
    }
    return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter an integer : 2017
The reverse of a given number : 7102
2017 is not a palindrome

Test Case - 2
User Output
Enter an integer : 1221
The reverse of a given number : 1221
1221 is a palindrome

Test Case - 3
User Output
Enter an integer : 12321
The reverse of a given number : 12321
12321 is a palindrome

Test Case - 4
User Output
Enter an integer : 18771
The reverse of a given number : 17781
18771 is not a palindrome