S.No: 15	Exp. Name: ***Write a C program to calculate whether a given number is Palindrome or not***	Date:2023-01-06

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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;
}
```

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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

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