

Convert the following algorithm into a program and find its time complexity using counter method.

```
void reverse(int n)
{
    int rev = 0, remainder;
    while (n != 0)
    {
        remainder = n % 10;
        rev = rev * 10 + remainder;
        n/= 10;

    }
    print(rev);
}
```

Note: No need of counter increment for declarations and scanf() and count variable printf() statements.

Input:

A positive Integer n

Output:

Print the value of the counter variable

Answer:

```
1 #include<stdio.h>
2 void reverse(int n){
3     int c=0;
4     c++;
5     int rev=0;
6     c++;
7
8     while(n!=0){
9         c++;
10        int remainder = n % 10;
11        c++;
12        rev = rev * 10 + remainder;
13
14        n/= 10;
15        c++;
16        c++;
17    }
18    c++;
19
20
21    printf("%d ",c);
22 }
23
24 int main(){
25     int n;
26     scanf("%d",&n);
27     reverse(n);
28 }
```

	Input	Expected	Got	
✓	12	11	11	✓
✓	1234	19	19	✓

Passed all tests! ✓