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**Started on** Wednesday, 13 August 2025, 10:59 AM

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**State** Finished

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**Completed on** Wednesday, 13 August 2025, 11:09 AM

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**Time taken** 9 mins 58 secs

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**Marks** 1.00/1.00

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**Grade** **10.00** out of 10.00 (**100%**)

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**Question 1** | Correct Mark 1.00 out of 1.00

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 int c=0;
3 void reverse(int n)
4 {
5     int rev = 0, remainder;
```

```

5   int rev = 0, remainder;
6   c++;
7   while (n != 0)
8   {
9       c++;
10      remainder = n % 10;
11      c++;
12
13      rev = rev * 10 + remainder;
14      c++;
15
16      n/= 10;
17      c++;
18  }
19
20
21 }
22
23
24
25 int main(){
26     int a;
27     scanf("%d\n",&a);
28     c=0;
29     reverse(a);
30     printf("%d\n",c+2);
31     return 0;
32 }

```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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