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

State Finished

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

Time taken 9 mins 58 secs

Marks 1.00/1.00

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

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 {
    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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