





(a) (b) VARSHINI S 2024-CSE •



Started on	Wednesday, 13 August 2025, 9:44 PM
State	Finished
Completed on	Wednesday, 13 August 2025, 9:51 PM
Time taken	7 mins 11 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:

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

	Input	Expected	Got	
~	12	11	11	~
~	1234	19	19	~

