RAJALAKSHMI ENGINEERING COLLEGE



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| **Started on** | Friday, 3 October 2025, 1:39 PM |
| **State** | Finished |
| **Completed on** | Tuesday, 18 November 2025, 9:56 AM |
| **Time taken** | 45 days 20 hours |
| **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:**

```c
#include <stdio.h>

int main() {
    int n;
    scanf("%d", &n);

    int rev = 0, remainder;
    int count = 0;
    count += 3;

    while (n != 0) {
        count++;
        remainder = n % 10;
        count++;
        rev = rev * 10 + remainder;
        count++;
        n /= 10;
        count++;
    }

    printf("%d", count);
    return 0;
}
```

| | 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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