**FINDING TIME COMPLEXITY OF ALGORITHMS**

PROBLEM 5:

Finding Complexity using Counter Method

AIM:

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);  
}

CODE:

#include<stdio.h>

int main(){

int count=0;

int n;

scanf("%d",&n);

int rev = 0, remainder;

count++;

while (n != 0)

{count++;

remainder = n % 10;

count++;

rev = rev \* 10 + remainder;

count++;

n/= 10;

count++;

}count++;

//printf("%d",rev);

count++;

printf("%d",count);

}

INPUT:

12 1234

OUTPUT:

11 19