

Name: KEY SOLUTION ID:

Write a complete C code that finds the number of digits in an integer number N and the digit with maximum value. The code should first prompt the user to enter N, if N is less than 10 the code should keep prompting the user to enter a positive integer > 9. The code should then find and display the number of digits in N and the digit with maximum value.

Sample Program Run:

```
Enter a number n > 9: -5
Enter a valid number > 9: 8
Enter a valid number > 9: 2589247
Number of Digits in 2589247 = 7
Maximum Digit in 2589247 is 9
```

```
#include <stdio.h>

int main(void){
    int n, r, m, max, count;

    printf("Enter a number n > 9: ");
    scanf("%d",&n);

    while(n <= 9){
        printf("Enter a valid number > 9: ");
        scanf("%d",&n);
    }
    m = n;
    count = 0;
    max = m%10;
    do{
        r = m%10;
        if(r>max)
            max = r;
        m = m/10;
        count++;
    }while(m != 0);

    printf("Number of Digits in %d = %d\n",n, count);
    printf("Maximum Digit in %d is %d\n",n, max);
    return 0;
}
```