WEEK 5

Write a C program to count total number of digits of an Integer number (N).

```
#include<stdio.h>

int main()
{
    int a,dig;
    scanf("%d",&a);
    int original_num=a;
    while(a!=0)
    {
        a/=10;
        dig++;
    }
    printf("The number %d contains %d digits.",original_num,dig);
    return 0;
}
```

	Input	Expected	Got	
✓	3456	The number 3456 contains 4 digits.	The number 3456 contains 4 digits.	✓
✓	30000	The number 30000 contains 5 digits.	The number 30000 contains 5 digits.	✓
✓	57	The number 57 contains 2 digits.	The number 57 contains 2 digits.	✓
✓	909	The number 909 contains 3 digits.	The number 909 contains 3 digits.	✓

Your code failed one or more hidden tests.
Your code must pass all tests to earn any marks. Try again.

Write a C program to check whether the given number(N) can be expressed as Power of Two (2) or not.

```
#include<stdio.h>
int ispoweroftwo(int n)
{
    if(n<=0)
    {
        return 0;
    }
    return(n&(n-1))==0;
}
int main()
{
    int a;
    scanf("%d",&a);
    if(ispoweroftwo(a))
    {
        printf("%d is a number that can be expressed as power of 2.",a);
    }
    else
```

	Input	Expected	Got	
✓	8	8 is a number that can be expressed as power of 2.	8 is a number that can be expressed as power of 2.	✓
✓	46	46 cannot be expressed as power of 2.	46 cannot be expressed as power of 2.	✓
✓	1024	1024 is a number that can be expressed as power of 2.	1024 is a number that can be expressed as power of 2.	✓

Write a program in C to find the sum of the series 1 +11 + 111 + 1111 + . . . + n terms (n will be given as input from the user and sum will be the output)

```
int sum_sum(int n)
{
    int t=0;
    int tsum=0;
    for(int i=0;i<=n;i++)
    {
        tsum=tsum+t;
        t=t*10+1;
    }
    return tsum;
}
int main()
{
    int n;
    scanf("%d",&n);
    int res=sum_sum(n);
    printf("%d",res);
    return 0;
```

	Input	Expected	Got	
✓	4	1234	1234	✓
✓	6	123456	123456	✓