CTSD PRACTICAL 2023

❖ PRACTICAL: 4

1. Write a C program to find the sum of individual digits of a positive integer.

```
#include <stdio.h>
int main(void)
{
  int num, sum = 0, rem;
  printf("Enter a number: ");
  scanf("%d", &num);
  while (num != 0)
  {
    rem = num % 10;
    sum = sum + rem;
    num = num / 10;
  }
  printf("Sum of digits of the number is %d", sum);
  return 0;
}
```

OUTPUT:

Enter a number: 123 Sum of digit of the number is 6

Enter a number: 8679

Sum of digit of the number is 30

2. A Fibonacci sequence is defined as follows: the first and second terms in the sequences are 0 and 1. Subsequent terms are found by adding the preceding two terms in the sequence. Write a C program to generate the first n terms of the sequence.

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int a = 0, b = 1, length Of Series = 0, counter, sum = 0;
  clrscr();
  printf("Enter the length of series \n ");
```

```
scanf("%d", &lengthOfSeries);
printf("Fibonacci series\n");
printf("%d %d", a, b);
for(counter = 2; counter < lengthOfSeries; counter++)
{
    sum = a + b;
    printf(" %d",sum);
    a = b;
    b = sum;
}
getch();
}

OUTPUT:

Enter the length of series
15
Fibonacci series
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377
```