

Problem No: 6

Problem Name: Write a program to find the sum of all digits using recursion.

Input	Output
123	6
12	3

Source Code:

```
#include <stdio.h>

int sumOfDigits(int num) {
    if (num == 0)
        return 0;
    else
        return num % 10 + sumOfDigits(num / 10);
}

int main() {
    int num;
    scanf("%d", &num);
    int result = sumOfDigits(num);
    printf("%d\n",result);

    return 0;
}
```

Result and Analysis:

This program takes one parameter in subfunction and the subfunction recursively returns the function to get sum of the digits and finally when the subfunction is being called in main function the result is being shown.