

Aim:

Write a C program that reads a five-digit integer from the user and prints the sum of its digits.

Input Format:

- Input contains a single five-digit number n .

Output Format:

- Print the sum of individual digits if the input is valid (i.e., n has exactly 5 digits).
- Print "Invalid input" if the input is invalid (i.e., n does not have exactly 5 digits).

Constraints:

- $10000 \leq n \leq 99999$

Source Code:sum.c

```
#include <stdio.h>

int main() {
    int num, sum = 0;

    // Input a number
    scanf("%d", &num);

    // Check if it's a five-digit number
    if (num < 10000 || num > 99999) {
        printf("Invalid input\n");
        return 0;
    }

    // Calculate sum of digits
    int temp = num;
    while (temp > 0) {
        sum += temp % 10;
        temp /= 10;
    }

    // Output the result
    printf("%d\n", sum);

    return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1

10564
16

Test Case - 2
User Output
12345
15

Test Case - 3
User Output
555555
Invalid input

Test Case - 4
User Output
1001
Invalid input