

# **Project-1**

## **Mini Calculator(Function)**

**AIM:-** The aim of this project is to create a Mini Calculator using functions that performs various mathematical operations based on user choice, using modular programming for better structure and clarity.

**Step 1:** Define separate functions for each operation you want to perform.

**Step 2:** Each function should take required input parameters and return the result.

**Step 3:** In the main() function, display a menu with numbered options for the operations.

**Step 4:** Ask the user to enter their choice using scanf. Step 5: Store the user's choice in a variable.

**Step 6:** Use a switch-case or if-else in main() to match the choice.

**Step 7:** Call the corresponding function based on the user's choice.

**Step 8:** Pass any required inputs to the function while calling it.

**Step 9:** Receive the returned result from the function. Step 10: Print the result on the screen.

## INPUT:-

```
1 #include <stdio.h>
2
3 /* Functions */
4 int add(int a, int b)
5 {
6     return a + b;
7 }
8
9 int sub(int a, int b)
10 {
11     return a - b;
12 }
13
14 int mul(int a, int b)
15 {
16     return a * b;
17 }
18
19 int div(int a, int b)
20 {
21     return a / b;
22 }
23
24 int main()
25 {
26     int a, b, choice, ans;
27
28     printf("Mini Calculator\n");
29     printf("1.Addition\n");
30     printf("2.Subtraction\n");
31     printf("3.Multiplication\n");
32     printf("4.Division\n");
33
34     printf("Enter your choice: ");
35     scanf("%d", &choice);
36
37     printf("Enter two numbers: ");
38     scanf("%d %d", &a, &b);
39
40     if (choice == 1)
41         ans = add(a, b);
42     else if (choice == 2)
43         ans = sub(a, b);
44     else if (choice == 3)
45         ans = mul(a, b);
```

```
45     |     ans = mul(a, b);
46     | else if (choice == 4)
47     |     ans = div(a, b);
48     | else
49     |
50     |     printf("Wrong choice");
51     |     return 0;
52     |
53
54     printf("Answer = %d", ans);
55
56     return 0;
57 }
```

## OUTPUT:-

```
Mini Calculator
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice: 1
Enter two numbers: 2 4
Answer = 6

==== Code Execution Successful ====
```