

```
1 #include <stdio.h> //'stdio.h' contains declaration of 'printf()'
2
3 // ***** USER DEFINED FUNCTIONS : METHOD OF CALLING FUNCTION 1 *****
4 // ***** CALLING ALL FUNCTIONS IN main() DIRECTLY *****
5
6 // Entry-Point Function => main() => Valid Return Type (int) and 3 Parameters
7 (int argc, char *argv[], char *envp[])
8 int main(int argc, char *argv[], char *envp[])
9 {
10     //function prototypes OR declarations
11     void MyAddition(void);
12     int MySubtraction(void);
13     void MyMultiplication(int, int);
14     int MyDivision(int, int);
15
16     //variable declarations
17     int result_subtraction;
18     int a_multiplication, b_multiplication;
19     int a_division, b_division, result_division;
20
21     //code
22
23     // *** ADDITION ***
24     MyAddition(); //function call
25
26     // *** SUBTRACTION ***
27     result_subtraction = MySubtraction(); //function call
28     printf("\n\n");
29     printf("Subtraction Yields Result = %d\n", result_subtraction);
30
31     // *** MULTIPLICATION ***
32     printf("\n\n");
33     printf("Enter Integer Value For 'A' For Multiplication : ");
34     scanf("%d", &a_multiplication);
35
36     printf("\n\n");
37     printf("Enter Integer Value For 'B' For Multiplication : ");
38     scanf("%d", &b_multiplication);
39
40     MyMultiplication(a_multiplication, b_multiplication); //function call
41
42     // *** DIVISION ***
43     printf("\n\n");
44     printf("Enter Integer Value For 'A' For Division : ");
45     scanf("%d", &a_division);
46
47     printf("\n\n");
48     printf("Enter Integer Value For 'B' For Division : ");
49     scanf("%d", &b_division);
50
51     result_division = MyDivision(a_division, b_division); //function call
52     printf("\n\n");
```

```
52     printf("Division Of %d and %d Gives = %d (Quotient)\n", a_division,  
53           b_division, result_division);  
54  
55     printf("\n\n");  
56     return(0);  
57 }  
58  
59 // *** Function Definition Of MyAddition() *****  
60 void MyAddition(void) //function definition  
61 {  
62     //variable declarations : local variables to MyAddition()  
63     int a, b, sum;  
64  
65     //code  
66     printf("\n\n");  
67     printf("Enter Integer Value For 'A' For Addition : ");  
68     scanf("%d", &a);  
69  
70     printf("\n\n");  
71     printf("Enter Integer Value For 'B' For Addition : ");  
72     scanf("%d", &b);  
73  
74     sum = a + b;  
75  
76     printf("\n\n");  
77     printf("Sum Of %d And %d = %d\n\n", a, b, sum);  
78 }  
79  
80 // *** Function Definition Of MySubtraction() *****  
81 int MySubtraction(void) //function definition  
82 {  
83     //variable declarations : local variables to MySubtraction()  
84     int a, b, subtraction;  
85  
86     //code  
87     printf("\n\n");  
88     printf("Enter Integer Value For 'A' For Subtraction : ");  
89     scanf("%d", &a);  
90  
91     printf("\n\n");  
92     printf("Enter Integer Value For 'B' For Subtraction : ");  
93     scanf("%d", &b);  
94  
95     subtraction = a - b;  
96     return(subtraction);  
97 }  
98  
99 // *** Function Definition Of MyMultiplication() *****  
100 void MyMultiplication(int a, int b) //function definition  
101 {  
102     //variable declarations : local variables to MyMultiplication()
```

```
103     int multiplication;
104
105     //code
106     multiplication = a * b;
107
108     printf("\n\n");
109     printf("Multiplication Of %d And %d = %d\n\n", a, b, multiplication);
110 }
111
112 // *** Function Definition Of MyDivision() *****
113 int MyDivision(int a, int b) //function definition
114 {
115     //variable declarations : local variables to MyDivision()
116     int division_quotient;
117
118     //code
119     if (a > b)
120         division_quotient = a / b;
121     else
122         division_quotient = b / a;
123
124     return(division_quotient);
125 }
126
```