

```
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");
```

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