

```
1  #include <stdio.h> // for printf()
2  #include <conio.h> // for getch()
3
4  int main(void)
5  {
6      //variable declarations
7      int a, b;
8      int result;
9
10     char option, option_division;
11
12     //code
13     printf("\n\n");
14
15     printf("Enter Value For 'A' : ");
16     scanf("%d", &a);
17
18     printf("Enter Value For 'B' : ");
19     scanf("%d", &b);
20
21     printf("Enter Option In Character : \n\n");
22     printf("'A' or 'a' For Addition : \n");
23     printf("'S' or 's' For Subtraction : \n");
24     printf("'M' or 'm' For Multiplication : \n");
25     printf("'D' or 'd' For Division : \n\n");
26
27     printf("Enter Option : ");
28     option = getch();
29
30     printf("\n\n");
31
32     if (option == 'A' || option == 'a')
33     {
34         result = a + b;
35         printf("Addition Of A = %d And B = %d Gives Result %d !!!\n\n", a, b, result);
36     }
37
38     else if (option == 'S' || option == 's')
39     {
40         if (a >= b)
41         {
42             result = a - b;
43             printf("Subtraction Of B = %d From A = %d Gives Result %d !!!\n\n", b, a, result);
44         }
45         else
46         {
47             result = b - a;
48             printf("Subtraction Of A = %d From B = %d Gives Result %d !!!\n\n", a, b, result);
49         }
50     }
```

```
50     }
51
52     else if(option == 'M' || option == 'm')
53     {
54         result = a * b;
55         printf("Multiplication Of A = %d And B = %d Gives Result %d !!!\n\n", a,
56             b, result);
57     }
58
59     else if (option == 'D' || option == 'd')
60     {
61         printf("Enter Option In Character : \n\n");
62         printf("'Q' or 'q' or '/' For Quotient Upon Division : \n");
63         printf("'R' or 'r' or '%" For Remainder Upon Division : \n");
64
65         printf("Enter Option : ");
66         option_division = getch();
67
68         printf("\n\n");
69
70         if (option_division == 'Q' || option_division == 'q' || option_division
71             == '/')
72         {
73             if (a >= b)
74             {
75                 result = a / b;
76                 printf("Division Of A = %d By B = %d Gives Quotient = %d !!!\n
77                     \n", a, b, result);
78             }
79             else
80             {
81                 result = b / a;
82                 printf("Division Of B = %d By A = %d Gives Quotient = %d !!!\n
83                     \n", b, a, result);
84             }
85         }
86
87         else if (option_division == 'R' || option_division == 'r' ||
88             option_division == '%')
89         {
90             if (a >= b)
91             {
92                 result = a % b;
93                 printf("Division Of A = %d By B = %d Gives Remainder = %d !!!\n
94                     \n", a, b, result);
95             }
96             else
97             {
98                 result = b % a;
99                 printf("Division Of B = %d By A = %d Gives Remainder = %d !!!\n
100                     \n", b, a, result);
101             }
102         }
103     }
104 }
```

```
95     }
96
97     else
98         printf("Invalid Character %c Entered For Division !!! Please Try Again...\n\n", option_division);
99     }
100
101     else
102         printf("Invalid Character %c Entered !!! Please Try Again...\n\n", option);
103
104     printf("If - Else If - Else Ladder Complete !!!\n");
105
106     return(0);
107 }
108
```