```
#include <stdio.h>
 1
 2
 3 int main(void)
 4
        //function declarations
 5
 6
        void MathematicalOperations(int, int, int *, int *, int *, int *, int *);
 7
 8
        //variable declaration
 9
        int a;
        int b;
10
11
        int answer_sum;
        int answer_difference;
12
13
        int answer_product;
14
        int answer_quotient;
        int answer_remainder;
15
16
17
        //code
        printf("\n\n");
18
        printf("Enter Value Of 'A' : ");
19
20
        scanf("%d", &a);
21
22
        printf("\n\n");
        printf("Enter Value Of 'B' : ");
23
24
        scanf("%d", &b);
25
26
        // PASSING ADDRESSES TO FUNCTION ... FUNCTION WILL FILL THEM UP WITH
          VALUES ... HENCE, THEY GO INTO THE FUNCTION AS ADDRESS PARAMETERS AND
          COME OUT OF THE FUNCTION FILLED WITH VALID VALUES
27
        // THUS, (&answer sum, &answer difference, &answer product,
                                                                                     P
          &answer quotient, &answer remainder) ARE CALLED "OUT PARAMETERS" OR
                                                                                     P
          "PARAMETERIZED RETURN VALUES" ... RETURN VALUES OF FUNCTIONS COMING VIA
          PARAMETERS
        // HENCE, ALTHOUGH EACH FUNCTION HAS ONLY ONE RETURN VALUE, USING THE
28
                                                                                     0
          CONCEPT OF "PARAMETERIZED RETURN VALUES", OUR FUNCTION
                                                                                     P
          "MathematicalOperations()" HAS GIVEN US 5 RETURN VALUES !!!
29
30
        MathematicalOperations(a, b, &answer_sum, &answer_difference,
          &answer_product, &answer_quotient, &answer_remainder);
31
        printf("\n\n");
32
        printf("***** RESULTS ****** : \n\n");
33
        printf("Sum = %d\n\n", answer_sum);
34
35
        printf("Difference = %d\n\n", answer_difference);
36
        printf("Product = %d\n\n", answer_product);
37
        printf("Quotient = %d\n\n", answer_quotient);
38
        printf("Remainder = %d\n\n", answer_remainder);
39
        return(0);
40 }
41
   void MathematicalOperations(int x, int y, int *sum, int *difference, int
      *product, int *quotient, int *remainder)
43 {
44
        //code
        *sum = x + y;
                          // Value at address 'sum' = (x + y)
45
        *difference = x - y; // Value at address 'difference' = (x - y)
46
        *product = x * y; // Value at address 'product' = (x * y)
47
```

```
...nterAsOutParameter\01-MethodOne\PointerAsOutParameter.c
```

```
*quotient = x / y; // Value at address 'quotient' = (x / y)
*remainder = x % y; // Value at address 'remainder' = (x % y)

50 }
51
```

2