Divide using switch-case

## Aim:

Write a program to read two integer values and an arithmetic operator, depending on the operator perform different arithmetic operations.

Exp. Name: Write a C program to make a simple Calculator to Add, Subtract, Multiply or

If integer values 2 and 3 are given with operator +, then the output should be 2 + 3 = 5.

If integer values  $\mathbf{6}$  and  $\mathbf{3}$  are given with operator  $\mathbf{7}$ , then the output should be  $\mathbf{6} / \mathbf{3} = 2$ .

If other than arithmetic operator is given, then display "Error! Operator is not correct".

**Note**: Space before %c removes any white space (blanks, tabs, or newlines). It means %c without space will read white space like new line(\n), spaces(' ') or tabs(\t). By adding space before %c, we are skipping this and reading only the char given.

**Instruction:** To run your custom test cases strictly map your input and output layout with the visible test cases.

## **Source Code:**

## Program406.c

```
#include<stdio.h>
int main()
{
   int a,b;
   char c;
   printf("Values: ");
   scanf("%d%d",&a,&b);
   printf("Operator: ");
   scanf("\n%c",&c);
   switch(c)
   {
      case '+': printf("%d + %d = %d\n",a,b,a+b);
               break;
      case '-': printf("%d - %d = %d\n",a,b,a-b);
               break;
      case '*': printf("%d * %d = %d\n",a,b,a*b);
               break;
      case '/': if(b==0)
      printf("Division is not possible! Divide by zero error");
      else
      printf("%d / %d = %d\n",a,b,a/b);
               break;
      case '%': if(b==0)
      printf("Modulo division is not possible! Divide by zero error");
      else
      printf("%d %% %d = %d\n",a,b,a%b);
               break;
      default:printf("Invalid Operator");
      break;
   }
}
```

## Execution Results - All test cases have succeeded!

	Test Case - 1	
User Output		
Values: 6 9		
Operator: -		
6 - 9 = -3		

	Test Case - 2	
User Output		
Values: 6 9		
Operator: *		
6 * 9 = 54		

	Test Case - 3	
User Output		
Values: 8 9		
Operator: @		
Invalid Operator		

Test Case - 4
User Output
Values: 12 0
Operator: /
Division is not possible! Divide by zero error

Test Case - 5
User Output
Values: 5 0
Operator: %
Modulo division is not possible! Divide by zero error