<http://www.trytoprogram.com/c-programming/c-conditional-operator/>

<http://www.turboc8.com/>

<https://bloodshed-dev-c.en.softonic.com/download>

<https://softfamous.com/dev-c/>

# include <stdio.h>   
int main()   
{    char o;   
    float num1,num2;  
    printf("Enter operator either + or - or \* or divide : ");  
    scanf("%c",&o);  
    printf("Enter two operands: ");  
    scanf("%f%f",&num1,&num2);   
    switch(o)  
 {  
        case '+':            printf("%.1f + %.1f = %.1f",num1, num2, num1+num2);  
            break;   
        case '-':            printf("%.1f - %.1f = %.1f",num1, num2, num1-num2);   
            break;   
        case '\*':            printf("%.1f \* %.1f = %.1f",num1, num2, num1\*num2);  
            break;   
        case '/':            printf("%.1f / %.1f = %.1f",num1, num2, num1/num2);  
            break;   
        default:            /\* If operator is other than +, -, \* or /, error message is shown \*/            printf("Error! operator is not correct");  
            break;   
    }   
    return 0;  
}

Here is simple calculator program implemented in C++

# include <iostream>  
using namespace std;  
  
int main()  
{  
 char op;  
 float num1, num2;  
  
 cout << "Enter operator either + or - or \* or /: ";  
 cin >> op;  
  
 cout << "Enter two operands: ";  
 cin >> num1 >> num2;  
  
 switch(op)  
 {  
 case '+':  
 cout << num1+num2;  
 break;  
  
 case '-':  
 cout << num1-num2;  
 break;  
  
 case '\*':  
 cout << num1\*num2;  
 break;  
  
 case '/':  
 cout << num1/num2;  
 break;  
  
 default:  
 // If the operator is other than +, -, \* or /, error message is shown  
 cout << "Error! operator is not correct";  
 break;  
 }  
  
 return 0;

1. #include <stdio.h>
2. #include <stdlib.h>
3. #include <math.h>
5. //Written by chaitanya
7. **int** main()
8. {
10. **int** input,a,b,result;
11. **char** option;
13. **do**{
15. printf("calculator:\n");
17. printf("\nEnter 1 for addition:\n ");
18. printf("Enter 2 for subtraction:\n ");
19. printf("Enter 3 for multiplication:\n ");
20. printf("Enter 4 for division:\n ");
22. scanf("%d",&input);
23. printf("Enter a number:\n");
24. scanf("%d",&a);
25. printf("Enter second number:\n");
26. scanf("%d",&b);
28. **switch**(input){
29. **case** 1 : result=a+b;
30. printf("The addition is : %d\n",result);
31. **break**;
32. **case** 2 : result=a-b;
33. printf("The Substraction is : %d\n",result);
34. **break**;
35. **case** 3 : result=a\*b;
36. printf("The Multiplication is : %d\n",result);
37. **break**;
38. **case** 4 : result=a/b;
39. printf("The division is : %d\n",result);
40. **break**;
42. **default**: printf("wrong input\n");
44. }
45. printf("Do you want to continue ? (y/n)\n");
46. option=getche();
48. }**while**(option=='y');
50. **return** 0;
51. }
52. // Performs addition, subtraction, multiplication or division depending the input from user
54. # include <stdio.h>
56. **int** main() {
58. **char** **operator**;
59. **double** firstNumber,secondNumber;
61. printf("Enter an operator (+, -, \*,): ");
62. scanf("%c", &**operator**);
64. printf("Enter two operands: ");
65. scanf("%lf %lf",&firstNumber, &secondNumber);
67. **switch**(**operator**)
68. {
69. **case** '+':
70. printf("%.1lf + %.1lf = %.1lf",firstNumber, secondNumber, firstNumber + secondNumber);
71. **break**;
73. **case** '-':
74. printf("%.1lf - %.1lf = %.1lf",firstNumber, secondNumber, firstNumber - secondNumber);
75. **break**;
77. **case** '\*':
78. printf("%.1lf \* %.1lf = %.1lf",firstNumber, secondNumber, firstNumber \* secondNumber);
79. **break**;
81. **case** '/':
82. printf("%.1lf / %.1lf = %.1lf",firstNumber, secondNumber, firstNumber / secondNumber);
83. **break**;
85. // operator doesn't match any case constant (+, -, \*, /)
86. **default**:
87. printf("Error! operator is not correct");
88. }
90. **return** 0;
91. }

If you have the basic knowledge of C language. You must know basic operators, if-else or switch syntax to work with.

Most programmers find switch easy but if else is used more which is easy too!

Here is the code for Calculator using If-else:

#include<stdio.h>  
void main()  
{

int num1, num2, cal; //decleration of integer variables  
char ope; //decleration of character variables

printf("Enter First Number");

scanf("%i", &num1); //Getting the first value from user

printf("Enter Second Number");

scanf("%i", &num2); //Getting the first value from user

printf("Choose Any Operator: + | - | / | \* \n");

scanf(" %c", &ope); // getting the operator for operation from user  
// Applying if-else to check conditions  
   
 if(ope == ' + ')  
 {  
 cal= num1 + num2;  
 printf("Addition of two numbers is: %i",cal);  
 }

else if(ope == ' - ')  
 {  
 cal= num1 - num2;  
 printf("Subtraction of two numbers is: %i",cal);  
 }

else if(ope == ' / ')  
 {  
 cal= num1 / num2;  
 printf("Division of two numbers is: %i",cal);  
 }

else if(ope == ' \*' )  
 {  
 cal= num1 \* num2;  
 printf("Multiplication of two numbers is: %i",cal);  
 }

else  
 {  
 printf("Invalid Input");   
 }  
}

To test if a number is divisible by two and four:

int number = 16;

if (number % 2 == 0 && number % 4 == 0)

{

  System.out.println("It's divisible by two and four!");

}

else

{

  System.out.println("It's not divisible by two and four!");

}

The conditional operator "&&" first evaluates whether its first operand (i.e., number % 2 == 0) is true and then evaluates whether its second operand (i.e., number % 4 == 0) is true. As both are true, the logical AND condition is true.

Syntax of C programming conditional operator

(condition) ? expression1 : expression2

If the **condition** is true then **expression1** is executed else **expression2** is executed.

