C# - ASSIGNMENT OPERATORS

There are following assignment operators supported by C#:

Operator	Description	Example
=	Simple assignment operator, Assigns values from right side operands to left side operand	C = A + B assigns value of A + B into C
+=	Add AND assignment operator, It adds right operand to the left operand and assign the result to left operand	C += A is equivalent to C = C + A
-=	Subtract AND assignment operator, It subtracts right operand from the left operand and assign the result to left operand	C -= A is equivalent to C = C - A
*=	Multiply AND assignment operator, It multiplies right operand with the left operand and assign the result to left operand	C *= A is equivalent to C = C * A
/=	Divide AND assignment operator, It divides left operand with the right operand and assign the result to left operand	C /= A is equivalent to C = C / A
%=	Modulus AND assignment operator, It takes modulus using two operands and assign the result to left operand	C %= A is equivalent to C = C % A
<<=	Left shift AND assignment operator	C <<= 2 is same as C = C << 2
>>=	Right shift AND assignment operator	C >>= 2 is same as C = C >> 2
&=	Bitwise AND assignment operator	C &= 2 is same as C = C & 2
^=	bitwise exclusive OR and assignment operator	C ^= 2 is same as C = C ^ 2
|=	bitwise inclusive OR and assignment operator	C |= 2 is same as C = C | 2

Example

The following example demonstrates all the assignment operators available in C#:

```
using System;
namespace OperatorsAppl
{
   class Program
   {
      static void Main(string[] args)
      {
         int a = 21;
         int c;
         c = a;
         Console.WriteLine("Line 1 - =  Value of c = {0}", c);

         c += a;
         Console.WriteLine("Line 2 - += Value of c = {0}", c);

         c -= a;
```

```
        Console.WriteLine("Line 3 - -=  Value of c = {0}", c);

        c *= a;
        Console.WriteLine("Line 4 - *=  Value of c = {0}", c);

        c /= a;
        Console.WriteLine("Line 5 - /=  Value of c = {0}", c);

        c = 200;
        c %= a;
        Console.WriteLine("Line 6 - %=  Value of c = {0}", c);

        c <<= 2;
        Console.WriteLine("Line 7 - <<=  Value of c = {0}", c);

        c >>= 2;
        Console.WriteLine("Line 8 - >>=  Value of c = {0}", c);

        c &= 2;
        Console.WriteLine("Line 9 - &=  Value of c = {0}", c);

        c ^= 2;
        Console.WriteLine("Line 10 - ^=  Value of c = {0}", c);

        c |= 2;
        Console.WriteLine("Line 11 - |=  Value of c = {0}", c);
        Console.ReadLine();
      }
    }
}
```

When the above code is compiled and executed, it produces the following result:

```
Line 1 - = Value of c = 21
Line 2 - += Value of c = 42
Line 3 - -= Value of c = 21
Line 4 - *= Value of c = 441
Line 5 - /= Value of c = 21
Line 6 - %= Value of c = 11
Line 7 - <<= Value of c = 44
Line 8 - >>= Value of c = 11
Line 9 - &= Value of c = 2
Line 10 - ^= Value of c = 0
Line 11 - |= Value of c = 2
```