Assignment Operator(=)

There are three types of assignment operator

1. Simple Assignment

a = 10;

2. Chained

a = b = c = 10;

3. Compound

a += 10;

We can perform

**int** a, b, c, d;

a = b = c = d = 10;

System.***out***.println(a + **", "** + b +**", "** +c+ **", "** +d);

Output:

10, 10, 10, 10

But we can’t perform

**int** a = b = c = d = 10;

will result in cannot find symbol b in class ...

Now this is valid

**int** b, c, d;

**int** a = b = c = d = 10;

Compound assignment operator

Sometimes assignment mixed with someother operator such type of assignment operator are called compound assginment operator.

Example:

**int** a=10;

a+=20;

System.***out***.println(a);

Possible Compound Operator:

|  |  |  |
| --- | --- | --- |
| += | &= | >>= |
| -= | |= | >>>= |
| \*= | ^= | <<= |
| /= |  |  |
| %= |  |  |

In the case of compound assignment operator internal type casting will be performed automatically

**byte** b = 10;

b = b + 1; //Compile time error because found int

System.***out***.println(b);

**byte** b1 = 10;

b1++;

System.***out***.println(b1);

**byte** b2 = 10;

b2 += 1; *//in compound assignment implicit type casting will be performed simultaneously*

System.***out***.println(b2);

**byte** b3 = 127;

b3 += 3; *//in compound assignment implicit type casting will be performed simultaneously*

System.***out***.println(b3);*//-126*

*Example 2:*

***int*** *a, b, c, d;*

a = b = c = d = 20;

a += b -= c \*= d /= 2;

System.***out***.println(a +**", "**+ b +**", "**+ c +**", "**+ d);

Output:

-160, -180, 200, 10