Second notes COM 1321

ASSIGNMENT OPERATORS

A list of all assignment operators:

Operator	Example	how it works	explanation
=	x = 5	x = 5	this assigns 5 to x
+=	x += 3	x = x + 3	this adds x and 3
-=	x -= 3	x = x - 3	this subtracts 3 from x
*=	x *= 3	x = x * 3	this multiplies x and 3
/=	x /= 3	x = x / 3	this divides x by 3
%=	x %= 3	x = x % 3	this divides x by 3 and gives the remainder

RELATIONAL (COMPARISON) OPERATOR

Relational comes from the word relationship, these operators will find how 2 operators are related , that is if one is greater than, less than or equal to the other.

Operator	Name	Example	explanation
==	Equal to	x == y	evaluates if 2 variables are equal
!=	Not equal	x != y	evaluates if 2 variables are different
>	Greater than	x > y	evaluates if a variable has more value than the other
<	Less than	x < y	evaluates if a variable has less value than the other
>=	Greater than or equal to	x >= y	evaluates if a variable has more value or equivalent value to another
<=	Less than or equal to	x <= y	evaluates if a variable has less value or equivalent value to another

When used this operators return true or false , for example

3==4 is false (because 3 is not equal to 4)

1==1 is true

3 != 4 is true (because 3 is not equal to 4)

3 !=3 is false

3 > 4 is false (because 3 is smaller than 4)

5>1 is true (because 5 is bigger than 1)

7 < 4 is false (because 3 is bigger than 4)

1>1 is true (because 1 is equal to 1)

LOGICAL OPERATORS

Logical operators check whether an expression is true or false, then decisions can be made depending on whether one or two statements are either true or false

Operator	Name	Description
&&	Logical and	Returns true if both statements are true
||	Logical or	Returns true if one of the statements is true
!	Logical not	Reverse the result, returns false if the result is true

Example	return
3<45 && 7< 10	true(both return true)
7 < 5 || 1 < 4	true(one of them is true
!(3<45 && 7< 10**)**	false(the expression was true and it got negated to false)

NB we will do details of this in class using examples and truth tables