

OPERATORS

COMPARISON OPERATORS

Operators	Description	Example
==	If the values of the two operands are equal, then the condition becomes true	(4 == 4) is true
!=	If values of the two operands are not equal, then the condition becomes true	(2!= 4) is true
>	If the value of the left operand is less than the value of the right operand, then the condition becomes false	(2 > 4) is false
<	If the value of the left operand is less than the value of the right operand, then the condition becomes true	(2 < 4) is true
>=	If the value of the left operand is less than or equal to the value of the right operand, then the condition becomes false	(2 >= 4) is false
<=	If the value of the left operand is less than or equal to the value of the right operand, then the condition becomes true	(2 <= 4) is true

LOGICAL OPERATORS

OPERATOR	DESCRIPTION	EXAMPLE
and (Logical AND)	If both the operands are true, then condition becomes true	(<i>True</i> and <i>False</i>) is False
or (Logical OR)	If any of the two operands are non-zero then condition becomes true	(<i>True</i> or <i>False</i>) is True
not (Logical NOT)	Used to reverse the logical state of its operand	not(<i>False</i>) is True not(<i>true</i>) is false

ASSIGNMENT OPERATORS

Operator	Description	Example
=	Assigns values from the right side operands to the left side operands	<code>x = a + b</code> assigns value of <code>a + b</code> into <code>x</code>
<code>+=</code> (Add AND)	Adds the right operand to the left operand and assigns the result to the left operand	<code>x += a</code> is equivalent to <code>x = x + a</code>
<code>-=</code> (Subtract AND)	Subtracts the right operand from the left operand and assigns the result to the left operand	<code>x -= a</code> is equivalent to <code>x = x - a</code>
<code>*=</code> (Multiply AND)	Multiplies the right operand with the left operand and assigns the result to the left operand	<code>x *= a</code> is equivalent to <code>x = x*a</code>
<code>/=</code> (Divide AND)	Divides the left operand with the right operand and assigns the result to the left operand	<code>x /= a</code> is equivalent to <code>x = x / a</code>
<code>%=</code> (Modulus AND)	Takes the modulus using two operands and assigns the result to left operand	<code>x %= a</code> is equivalent to <code>x = x % a</code>
<code>**=</code> (Exponent AND)	Performs exponential (power) calculation on operators and assigns value to the left operand	<code>x **= a</code> is equivalent to <code>x = x ** a</code>
<code>//=</code> (Floor Division)	Performs the floor division on operators and assigns value to the left operand	<code>x //= a</code> is equivalent to <code>x = x // a</code>

MEMBERSHIP OPERATORS

Operator	Description	Example
in	Evaluates to true if it finds a variable in the specified sequence and false otherwise	<code>x in y</code> , here in results in a 1 if <code>x</code> is a member of sequence <code>y</code>
not in	Evaluates to true if it does not finds a variable in the specified sequence and false otherwise	<code>x not in y</code> , here not in results in a 1 if <code>x</code> is not a member of sequence <code>y</code>

IDENTITY OPERATORS

Operator	Description	Example
is	Evaluates to true if the variables on either side of the operator point to the same object and false otherwise	<code>x is y</code> , here is results in 1 if <code>id(x)</code> equals <code>id(y)</code>
is not	Evaluates to false if the variables on either side of the operator point to the same object and true otherwise	<code>x is not y</code> , here is not results in 1 if <code>id(x)</code> is not equal to <code>id(y)</code>

input() function - to allow a user to take custom inputs

`input([prompt])`, `prompt` is the string we want to display into the screen and is optional. Regardless of the type of input we enter, the input is always taken in the form of a string.