WAP - WML OPERATORS

Arithmatic Operators:

There are following arithmatic operators supported by WML Script language:

Assume variable A holds 10 and variable holds 20 then:

Operator	Description	Example
+	Adds two operands	A + B will give 30
-	Subtracts second operand from the first	A - B will give -10
*	Multiply both operands	A * B will give 200
/	Divide numerator by denumerator	B / A will give 2
%	Modulus Operator and remainder of after an integer division	B % A will give 0
++	Increment operator, increases integer value by one	A++ will give 11
--	Decrement operator, decreases integer value by one	A-- will give 9

Comparison Operators:

There are following comparision operators supported by WML Script language

Assume variable A holds 10 and variable holds 20 then:

Operator	Description	Example
==	Checks if the value of two operands is equal or not, if yes then condition becomes true.	$A == B$ is not true.
!=	Checks if the value of two operands is equal or not, if values are not equal then condition becomes true.	$A != B$ is true.
>	Checks if the value of left operand is greater than the value of right operand, if yes then condition becomes true.	$A > B$ is not true.
<	Checks if the value of left operand is less than the value of right operand, if yes then condition becomes true.	$A < B$ is true.
>=	Checks if the value of left operand is greater than or equal to the value of right operand, if yes then condition becomes true.	$A >= B$ is not true.
<=	Checks if the value of left operand is less than or equal to the value of right operand, if yes then condition becomes true.	$A <= B$ is true.

Logical Operators:

There are following logical operators supported by WML Script language

Assume variable A holds 10 and variable holds 20 then:

Operator	Description	Example
and	Called Logical AND operator. If both the operands are true then condition becomes true.	$AandB$ is true.
or	Called Logical OR Operator. If any of the two operands is non zero then condition becomes true.	$AorB$ is true.
&&	Called Logical AND operator. If both the operands are non zero then condition becomes true.	A && B is true.
||	Called Logical OR Operator. If any of the two operands is non zero then condition becomes true.	$A\|\|B$ is true.
!	Called Logical NOT Operator. Use to reverses the logical state of its operand. If a condition is true then Logical NOT operator will make false.	! A && B is false.

Assignment Operators:

There are following assignment operators supported by WML Script language:

Operator	Description	Example
=	Simple assignment operator, Assigns values from right side operands to left side operand	C = A + B will assigne value of A + B into C
+=	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

Conditional Operator

There is one more oprator called conditional operator. This first evaluates an expression for a true or false value and then execute one of the two given statements depending upon the result of the evaluation. The conditioanl operator has this syntax:

Operator	Description	Example
? :	Conditional Expression	If Condition is true ? Then value X : Otherwise value Y

Operators Categories:

All the operators we have discussed above can be categorised into following categories:

- Unary prefix operators, which precede a single operand.
- Binary operators, which take two operands and perform a variety of arithmetic and logical operations.
- The conditional operator *aternaryoperator*, which takes three operands and evaluates either the second or third expression, depending on the evaluation of the first expression.
- Assignment operators, which assign a value to a variable.

Precedence of WML Script Operators:

Operator precedence determines the grouping of terms in an expression. This affects how an expression is evaluated. Certain operators have higher precedence than others; for example, the multiplication operator has higher precedence than the addition operator:

For example, x = 7 + 3 * 2; Here x is assigned 13, not 20 because operator * has higher precedenace than + so it first get multiplied with 3*2 and then adds into 7.

Here operators with the highest precedence appear at the top of the table, those with the lowest appear at the bottom. Within an expression, higher precedenace operators will be evaluated first.

Category	Operator	Associativity
Unary	! ++ --	Right to left
Multiplicative	* / %	Left to right
Additive	+ -	Left to right
Relational	< <= > >=	Left to right
Equality	== !=	Left to right
Logical AND	&&	Left to right
Logical OR	||	Left to right
Conditional	?:	Right to left
Assignment	= += -= *= /= %=	Right to left