UNIX / LINUX - C SHELL OPERATORS

We will now list down all the operators available in C Shell. Here most of the operators are very similar to what we have in C Programming language.

Operators are listed in the order of decreasing precedence –

Arithmetic and Logical Operators

The following table lists out a few Arithmetic and Logical Operators –

Sr.No.	Operator & Description
1	( ) Change precedence
2	~ 1's complement
3	! Logical negation
4	* Multiply
5	/ Divide
6	% Modulo
7	+ Add
8	-

	Subtract
9	**<<** Left shift
10	**>>** Right shift
11	**==** String comparison for equality
12	**!=** String comparison for non equality
13	**=~** Pattern matching
14	**&** Bitwise "and"
15	**^** Bitwise "exclusive or"
16	**|** Bitwise "inclusive or"
17	**&&** Logical "and"
18	**||** Logical "or"
19	**++**

	Increment
20	**--** Decrement
21	**=** Assignment
22	***=** Multiply left side by right side and update left side
23	**/=** Divide left side by right side and update left side
24	**+=** Add left side to right side and update left side
25	**-=** Subtract left side from right side and update left side
26	**^=** "Exclusive or" left side to right side and update left side
27	***%=*** Divide left by right side and update left side with remainder

File Test Operators

The following operators test various properties associated with a Unix file.

Sr.No.	Operator & Description
1	**-r file** Checks if file is readable; if yes, then the condition becomes true.

2	**-w file** Checks if file is writable; if yes, then the condition becomes true.
3	**-x file** Checks if file is executable; if yes, then the condition becomes true.
4	**-f file** Checks if file is an ordinary file as opposed to a directory or special file; if yes, then the condition becomes true.
5	**-z file** Checks if file has size greater than 0; if yes, then the condition becomes true.
6	**-d file** Checks if file is a directory; if yes, then the condition becomes true.
7	**-e file** Checks if file exists; is true even if file is a directory but exists.
8	**-o file** Checks if user owns the file; returns true if the user is the owner of the file.