

$\ll =$	Left Shift AND assignment operator
$\gg =$	Right Shift AND assignment operator
$\& =$	Bitwise AND assignment operator
$\wedge =$	Bitwise exclusive OR and assignment operator
$  =$	Bitwise inclusive OR and assignment operator

### \* Precedence of operators

→ The operators are applied and evaluated based on precedence. For example  $(+,-)$  has less precedence compared to  $(*,/)$ . Hence  $*$  &  $/$  are evaluated first.

In case we like to change this order, we use Parenthesis.

### \* Associativity

→ Associativity tells the direction of execution of operators. It can either be left to right or right to left:

- 1)  $*$ ,  $/$  → L to R
- 2)  $+$ ,  $-$  → L to R
- 3)  $++$ ,  $=$  → R to L



\* Resulting data type after arithmetic operation.

following table summarises the resulting data types after arithmetic operation on them.

$R = b + s \rightarrow \text{int}$  where,  
 $R = s + i \rightarrow \text{int}$   $b \rightarrow \text{byte}$   $f \rightarrow \text{float}$   
 $R = l + f \rightarrow \text{float}$   $s \rightarrow \text{short}$   $d \rightarrow \text{double}$   
 $R = i + f \rightarrow \text{float}$   $i \rightarrow \text{integer}$   $l \rightarrow \text{long}$   
 $R = c + i \rightarrow \text{int}$   $c \rightarrow \text{character}$   
 $R = c + s \rightarrow \text{int}$   
 $R = l + d \rightarrow \text{double}$   
 $R = f + d \rightarrow \text{double}$