Operators & Expressions

Arithmetic Operators:

(+ , − , * , / , %)

Integer Arithmetic : (integer o integer) → integer
Real " : (real o real) → real
Mixed-mode " : (integer o real) → real

Logical Operators:

(&& , || , !)

Truth table for above three logical operators.

Assignment Operator:

(=)

[V op= exp ;] = [V = V op (exp);]

Increment & Decrement Operators:

(++ , --)

Conditional Operators:

[exp1 ? exp2 : exp3]

Bitwise Operators:

[& , | , ^ , ~ , << , >> , >>>]

This operators may not be applied to float/double.

Relational Operators:

[< , <= , > , >= , == , !=]

Precedence and order of evaluation of operators:

Operators		Associativity
( ) [ ] → .		left to right
!, ~, ++, --, +, -, *, &, (type), sizeof	U	Left to right
*, /, %	a	Left to right
+, -		"
(<<, >>)	S	"
<, <=, >, >=	C	"
==, !=		"
&	B	"
^		"
| (Bitwise inclusive OR)		"
&&	L	"
||		"
?:		right to left
=, +=, -=, *=, /=, %=, &=, ^=, |=, <<=, >>=	a	right to left
,	C	left to right

Input from Keyboard:

```
import java.util.Scanner;
public class demo{
        PSVM (String arr[]){
            Scanner sc= new Scanner (System.in);
            int a = sc.nextInt();
            SOP(a);
        }
}
```

```
int a= sc.nextInt();
double a= sc.nextDouble();
String a= sc.next(); → Reads till space (ie. only one word)
        = sc.nextLine(); → Reads till next line
char a= sc.next().charAt(0);
```

Short Circuiting:

a || b || c			
T	x	x	→ T
F	T	x	→ T
F	F	T	→ T
		T	→ T
F	F	F	→ F

a && b && c			
F	x	x	→ F
T	F	x	→ F
T	T	F	→ F
		F	→ F
T	T	T	→ T

Command Line Arguments:

```
psvm ( String arr[]) {
        int a = Integer. parseInt (arr[0]);
        // First argument will store in 'a'.
        int b = Integer. parseInt (arr[1]),
        // Second argument will store in 'b'.

        SOP (a+b); // arr[0] + arr[1]
}
```

NOTE :

Parse : It is a method which take a String(input) as an argument and Convert in other formats as like:

```
Integer. parseInt() ;
Double . parseDouble() ;
Float . parseFloat() ;
```