Data Types

byte	8 bits
short	16 bits
int	32 bits
long	64 bits
boolean	1 bit
char	16 bit unicode
float	32 bit decimal
double	64 bit decimal

Byte (8 bits/1 byte)

-128 to 127

-2^7 to 2^7 -1

Default value is : 0

Byte data type is used to save space in large arrays, mainly in place of integers, since a byte is four times smaller than an int

Short (16 bits/2 bytes)

-32,768 to 32,767

-2^{15} to 2^{15} -1

Short data type can also be used to save memory as byte data type. A short is 2 times smaller than an int

int (32 bits/4 bytes)

-2^{31} to 2^{31}-1

default data type

Long (64 bits/8 bytes)

Default value is : 0L

long Variable_Name = Value_L;

Boolean (1 bits)

true and false

Default value is : false

Char (16 bits)

Unicode character

char a = 'A';

char japanese = "\u....."

Double and Float

Decimal number		
Double	64 bits/ 8 bytes	
Float	32 bits / 4 bytes	
mydouble = 0.1d	doublesci = 1.23e2 (scientific notation)	
myfloat = 0.1f		

Assignation Operator

Sign that use to determine data by using equal sign (=)
Ex. int x = 20;
x = 2 + 3 + 4;

Arithmetic Operator

a=30	b=15	
+	Addition	a+b = 45
-	Subtraction	a-b = 15
*	Multiplication	a * b = 450
/	Division	a / b = 2
%	Modulus	a % b = 0
++	Increment	Increases the value of operand by 1 Ex. b++ = 16
--	Decrement	Decreases the value of operand by 1 Ex. b-- = 14

Relational Operator

==	equal to
!=	not equal to
>	grater than
<	less than
>=	grater than or equal to
<=	less than or equal to