**Data types :**

In java there are 8 data types :

byte - 1byte

short (0) it represent whole sign number - 2byte

int eg : 24,22,55,44 - 4byte

long - 8 bytes

float (0.0) it represent point value / decimal value - 4 bytes

double eg : 2.4,6.5,7.5 - 8 bytes

char -( ) it represent a single char like letter or number 2 bytes

eg : ‘e’, ‘8’

boolean - it represent true or false (default value is false)

Primitive type and non primitive type

**Variable :**

Variable is a container, it is a basic unit of storage in java program.

int a=5;

float b=6.4;

char c=‘a’;

boolean d=true;

String e=“hello”;

int f;

f=34;

int ee=43,er=45;

**package p1;**

**public class DataTypeDemo {**

**public static void main(String[] args) {**

**// TODO Auto-generated method stub**

**int a=5;**

**char b='e';**

**float f=4.3f;**

**double e=5.4443;**

**boolean g=true;**

**System.*out*.println("integer value is : "+a);**

**System.*out*.println("char value is :"+b);**

**System.*out*.println("float value is : "+f);**

**System.*out*.println("double value is : "+e);**

**System.*out*.println("boolean value is : "+g);**

**}**

**}**

**Identifier :**

Identifier is a name in java program, used for identification purpose.

class name, variable name, method name

rules to give the identifier

a to z

A to Z

0 to 9

\_

$

Identifier should not start with a number

12cash - not a valid identifier

cash12 – valid identifier

java is a case sensitive

a – 97

A - 65

**Operators**

**Arithmetic Operator**

+ - Addition

* - Subtraction

\* - multiplication

/ - division ( quotient )

% - modulus ( remainder )

+= - Addition assignment

a+=b;

a=a+b;

-= - Subtraction assignment

a-=b

a=a-b

\*= - mulplication assignment

/= - division assignment

%= - modulus assignment

++ - increment

--

decrement

**public class ArithmeticOperator1 {**

**public static void main(String[] args) {**

**// TODO Auto-generated method stub**

**int a=4,b=3;**

**a +=b; // a=a+b;**

**System.*out*.println("the value of a : "+ a);**

**a -= b; // a=a-b**

**System.*out*.println(" the value of a : "+a);**

**a \*= b; // a=a\*b**

**System.*out*.println("the value of a :" + a);**

**a /= b; // a=a/b**

**System.*out*.println("the value of a : "+ a);**

**a %=b; // a=a%b**

**System.*out*.println("the value of a : "+1);**

**}**

**}**