'I' 'S'
'a'

Data Type

A   2   3.7   9
Del

Data Type	Default Value	Default size
boolean	false	1 bit
char	'\u0000'	2 byte
byte	0	1 byte
short	0	2 byte
int	0	4 byte
long	0L	8 byte
float	0.0f	4 byte
double	0.0d	8 byte

Primitive ... **Non-Primitive**
— String
— Array
— etc.

Boolean   **Numeric**

true
false

Character   **Integral**

'A' 'I'
'B'

Integer   **Floating-point**

boolean char byte short int long   float   double

$(-2^{63} \rightarrow 2^{63}-1) \rightarrow$ long

$(-2^{31} \rightarrow 2^{31}-1) \rightarrow$ int

$(-128 \rightarrow +127)$

$(32,768 \rightarrow +32,767) \rightarrow$ short

int $\rightarrow$ 3, 7, 9, 2, 200

float $\rightarrow$ 3.7, 2.24

double $\rightarrow$ 3.3797222222

Variable

a = 5
b = 9

5
a

9
b

How to declare variable

= $\rightarrow$

Memory

Syntax
datatype   var_name ;

int a;
a = 5;

int a = 5;

5
a
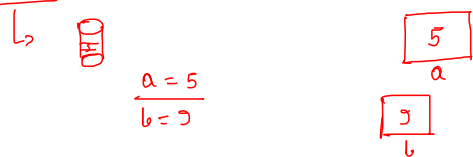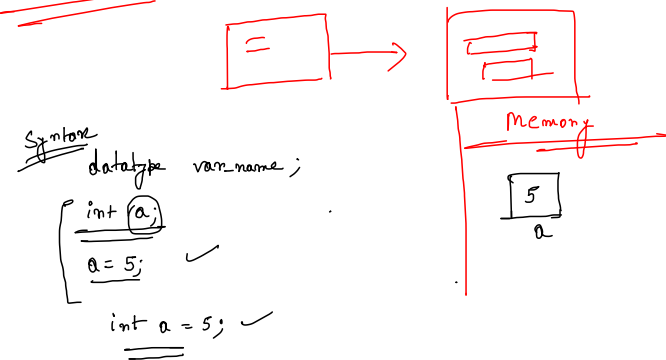
Variable

for X

int int X

a
ab

a b X

a_b   a-b

$$\boxed{3} + \boxed{3} = \boxed{6}$$

```
/pe_var >  Sum.java
public class Sum{
    public static void main(String[] args){
        int a,b,c;
        a=10;
        b=5;
        c=a+b;
        System.out.println("Sum is:"+c);   // 15
        System.out.println(c);   15
    }
}
```

$\boxed{10}$ $\boxed{5}$ $\boxed{15}$
   a   b   c

Sum is : 15

+✓   −, *, /