Operators and Expression

byle b=10; short S=15; int i=7; long l=50l; float f=12.5f; double d=17.5d; (char c=65;)

Short + short

byte (+) byte

short + short

int + int

short + int

Coucion

int X = b + s in X = c + s; int X = s + i int X = c + i; float X = i + f deb(X = f + d; float X = f + f deb(X = f + d; Jab ham ine mai sai kisi bhi type par koi operation karenga tab always hama integer value hi milta hai as a reult.

Increment / Decrement

post ++ , post -
++ pre , -- pre

Arithametic

* , / , /. High precedense

+, - Low precedense

Bitwise &, 1, ~, ^, «, », »» Relational <, <=, >, >=, ==,!= Logical

@Post increment

Ise mai phela value use hota ha then update hota hai.

OPre increment

Ise mai phela value update hota ha then use hota hai

Post increment

$$int = x=5, y;$$
 $y = x+t;$
 $x=6$

C=a*(++x)

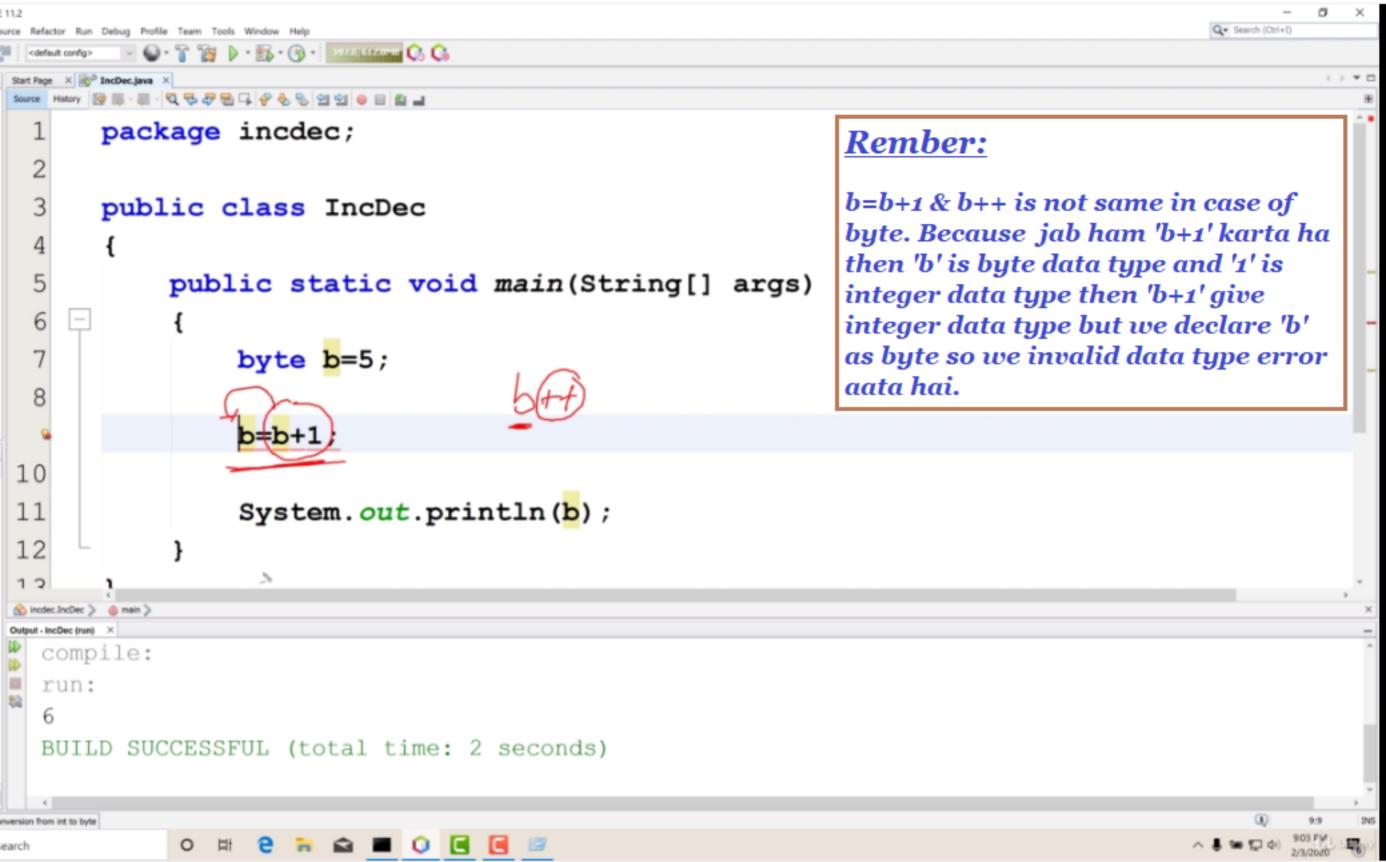
Pre increment
$$y = ++x;$$

$$y = 6$$

Arithametic *, 1, %

Bitwise 2, 1, ~, ^, «, », »» Relational

<, <=, >, >= , == ,!=



Bitwise Operators

AND	\wedge	&
OR	V	1
NOT		~
XOR	①	٨
RIGHT SH	IFT	>>
UNSIGNED RIGHT:		>>>
LEFT SHIF	Γ	<<



	2	0000	d:	0.90
A	B	A 21	3 /	
0	0	0		
0	1	0	Ţ	
-	0	0	7	
1	1	1	ĺ	
	1		•	
A	B	AB		
0	0	0		
0	1			
+	0	1		
1	1	1		
	^			
A	RI	110		

0

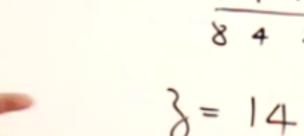
Bitwise operators

$$y \to 00000100$$

$$y = x8y 00000010$$

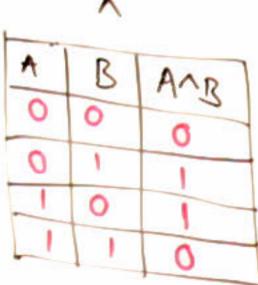
A 0 0 1 1	2 0 1 0 1	\$	A 2 0 0 0 0 1	B
A 0 0 1	B 0 1 0	A 0 1	¦B	
1	^	1		
A 0 0	B	A^	B	

$$y \rightarrow 00000100$$
 $y \rightarrow 00000110$
 $y = x!y \qquad 0000110$



A	B	ABB
0	0	0
0	1	0
1	0	0
l	1	1

A	B	AIB
0	0	0
0)	1
1	0	1
1	1	1



ØJava mai koi bhi '-ve' integer hmasa 2's compliment ka form mai save hota hai.

<u>Note:</u> 1's compliment ka liya ham phela sabhi value koi uska opp. digit sa replace kar deta hai. Then for 2's compliment add '1' in 1's compliment.