operator name	Sign	A = 10, B = 20
Assignment	=	A = B, [A = 20]
Addition	+	A + B = 30
Subtraction	-	A - B = - 10
Multiplication	*	A * B = 200
Division	/	B / A = 2
Modulo	%	B % A = 0

Arithmetic operator

Operator Name	Sign	A = 10 ; B = 20
equal	==	(A == B) is not true
not equal	!=	(A != B) is True
less than	<	(A < B) is True
greater than	>	(A > B) is not true
less than or equal to	<=	(A <= B) is true
greater than or equal to	>=	(A >= B) is not true

Comparison

Operator Name	Sign	A=10; B=20
and (logical)	&&	(A && B) is True
OR (logical)	||	(A || B) is True
not	!	!(A && B) is False

Boolean Operator

Bitwise Operator

operator	sign	A = 6 ; B = 8
Binary and	&	A & B = 0

A = 6 | 0 | 1 | 1 | 0 |

B = 8 | 1 | 0 | 0 | 0 |

A & B = 0 0 0 0

operator	Sign
binary or	|

A = 6, B = 8

(A | B) = 14

	8	4	2	1
A = 6	0	1	1	0
B = 8	1	0	0	0
A | B = 14	1	1	1	0

Operation	sign
Binary XOR	$\wedge$

$A = 6 , B = 8$

$(A \wedge B) = 14$

$A = 6$ | 0 | 1 | 1 | 0 |

$B = 8$ | 1 | 0 | 0 | 0 |

$A \wedge B = 14$ | 1 | 1 | 1 | 0 |

Operator	sign	A = 6,
Binary not	~	~A = −6

$A = 6$

0	1	1	0

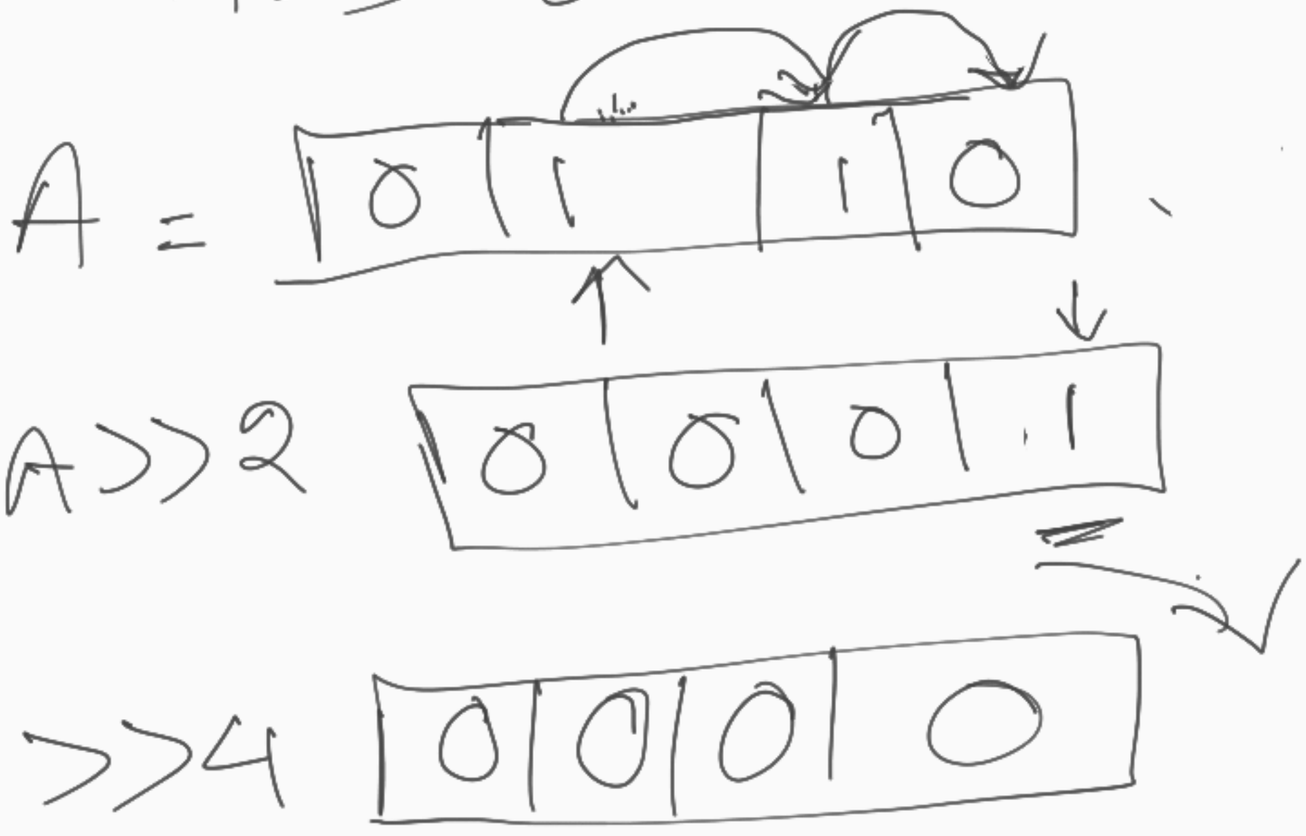
$\sim A = -6$

1	1	0	0	1

Operator	Sign
Right shift	>>

A = 6.

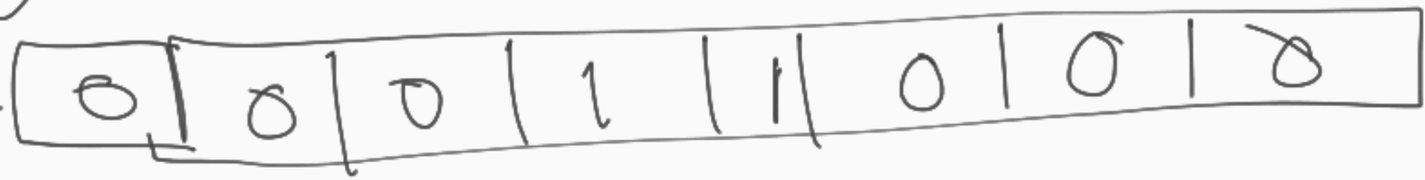
A >> 2 → 4



operator	Sign	A = 6
Left shift	<<	A << 2

A = 6

A << 2 =

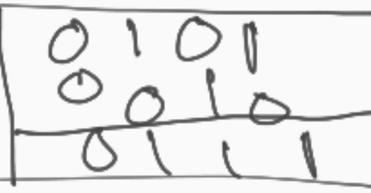


Compound Operator

Name	Sign	Example	
		A = 5, B = 2	
increment	++	A++ ⟹ A = 6	
decrement	--	A-- ⟹ 4	
Compound addition	+=	B += A	B = B + A
Compound Subtraction	-=	B -= A	B = B - A, → 3
Compound multiplication	*=	B *= A	B = B * A, 10

$A = 5$

0	1	0	1

Compound division	/=		
!! modulo	%=		
Compound bitwise OR	|=	A|= 2	A = A|2 
Compound bitwise And	&=	A&= 2	A = A & 2 0101 0010 0000