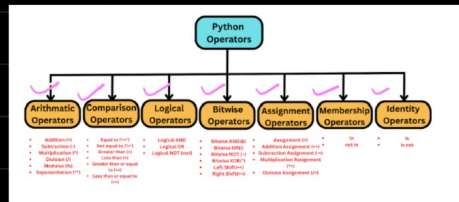


Operators  $a = 120$ ,  $b = \text{"Hiing"}$   $+$ ,  $-$ ,  $*$



**AND**  $A \cdot B$

perfect  $\rightarrow$  perfect perfect

**OR (satisfying)**  $A \cup B$

imperfect imperfect

$a = 2 \rightarrow$   $\boxed{2}$

$b = 3 \rightarrow$   $\boxed{3}$

**AND**

T	T	T
T	F	F
F	T	F
F	F	F

**OR**

True = 1, False = 0

T	T	T
T	F	T
F	T	T
F	F	F

**and**

0	0	0
0	1	0
1	0	0
1	1	1

**or**

1	1	1
1	0	1
0	1	1
0	0	0

$x = \text{"Push-me"}$

$y = x$

$y = x$

	3	2	1	0	
	2	2	2	2	
	0	0	0	1	1
	0	0	1	0	2
	0	0	1	1	3
	0	1	0	0	4

2, 1, ~, ^, XOR, Shift

$$\begin{array}{r} 10 \oplus 10 \\ \text{and} \\ 10 \oplus 10 \\ \hline \rightarrow 1010 \end{array}$$

$$\begin{array}{r} 18 \text{ --- } 10010 \\ 3 \text{ --- } 00011 \\ \hline 00010 \end{array}$$

XOR

	a	b	$a \wedge b$
	0	0	0
	1	0	1
	0	1	1
	1	1	0

$5 \wedge 3$

$101$

$11$

$XOR(\wedge)$

1	0	1
0	1	1

110

35

35 <<3

100011000

↓

280

Operators	Meaning
()	Parentheses
**	Exponent
+X, -X, ~X (X is variable)	Unary Plus, Unary Minus, Bitwise NOT
*, /, //, %	Multiplication, Division, Floor Division, Modulus
+, -	Addition, Subtraction
<<, >>	Bitwise Shift Operators
&	Bitwise AND
^	Bitwise XOR
	Bitwise OR
==, !=, >, >=, <, <=, is, is not, in, not in	Comparisons, Identity, Membership operators
not	Logical NOT
and	Logical AND
or	Logical OR