

Dado un conjunto de datos, estos pueden ser:

1, 2, 3, 3, 4

TUPLAS

(1, 2, 3, 3, 4)

+ 8 (apendizar)

(1, 2, 3, 3, 4, 8)

Modificar el 1 x 8

(8, 2, 3, 3, 4)

LISTAS

[1, 2, 3, 3, 4]

+ 8 (apendizar)

[1, 2, 3, 3, 4, 8]

Modificar el 1 x 8

[8, 2, 3, 3, 4]

**NUMPY
ARRAY**

array([1, 2, 3, 3, 4])

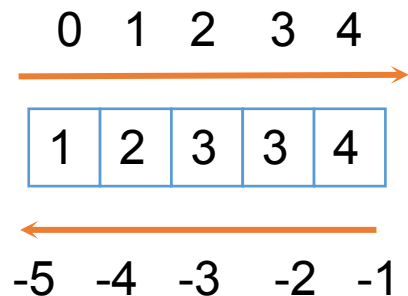
+ 8 (apendizar)

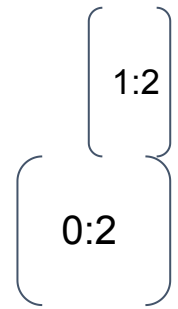
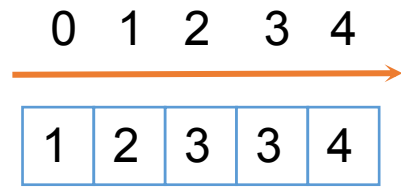
array([1, 2, 3, 3, 4, 8])

Modificar el 1 x 8

array([8, 2, 3, 3, 4])

Posiciones que ocupan:





True = 1 False = 0

AND (&)

True and True = True
False and True = False
True and False = False
False and False = False

1 and 1 = 1
0 and 1 = 0
1 and 0 = 0
0 and 0 = 0

OR (|)

True or True = True
False or True = True
True or False = True
False or False = False

1 or 1 = 1
0 or 1 = 1
1 or 0 = 1
0 or 0 = 0

XOR (^)

True ^ True = False
False ^ True = True
True ^ False = True
False ^ False = False

1 ^ 1 = 0
0 ^ 1 = 1
1 ^ 0 = 1
0 ^ 0 = 0

Bitwise

0 —> 0000	6 —> 0110
1 —> 0001	7 —> 0111
2 —> 0010	8 —> 1000
3 —> 0011	9 —> 1001
4 —> 0100	10 —> 1010
5 —> 0101	11 —> 1011

Bitwise right shift

$b = a \gg n$ $a = 2, n = 1$ $a / 2^n$

$a = 0010$
 $b = 0001 = 1$

Bitwise left shift

$b = a \ll 1$ $a = 2$ $a * 2^n$

$a = 0010$
 $b = 0100 = 4$

	Minúscula	Mayúscula
a	97	65
b	98	66
c	99	67
d	100	
e	101	
f	102	
g	103	
h	
y		
j		
.....		
z	122	90

0	48	espacio	32
1	49	!	33
2	50	"	34
3	51	#	35
4	.	\$	36
5	.	%	37
6		&	38
7		*	42
8			
9	57		