

For Magic



THE SEER

MAGIA XORNIANA

DÍA UNO

INTERCAMBIAR LOS VALORES DE
DOS VARIABLES, SIN USAR
VARIABLES INTERMEDIAS NI
TUPLAS



```
a = 27
```

```
b = 357
```

```
a = a ^ b
```

```
b = a ^ b
```

```
a = a ^ b
```

```
assert a == 357 and b == 27
```



$$0 \oplus 0 = 0$$

$$1 \oplus 0 = 1$$

$$0 \oplus 1 = 1$$

$$1 \oplus 1 = 0$$



$$0 \oplus 0 = 0$$

$$1 \oplus 0 = 1$$

$$0 \oplus 1 = 1$$

$$1 \oplus 1 = 0$$

$$x \oplus 0 = x$$



$$0 \oplus 0 = 0$$

$$1 \oplus 0 = 1$$

$$0 \oplus 1 = 1$$

$$1 \oplus 1 = 0$$

$$X \oplus 0 = X$$

$$X \oplus X = 0$$

MAGIA XORNIANA

[illegible]

MAGIA XORNIANA

b

tiempo	código	a	b
0	a = A	A	
1	b = B	A	B
2	a = a ^ b	$A \oplus B$	B

MAGIA XORNIANA

b

tiempo	código	a	b
0	a = A	A	
1	b = B	A	B
2	a = a ^ b	$A \oplus B$	B
3	b = a ^ b	$A \oplus B$	$A \oplus B \oplus B$

MAGIA XORNIANA

b

tiempo	código	a	b
0	a = A	A	
1	b = B	A	B
2	a = a ^ b	$A \oplus B$	B
3	b = a ^ b	$A \oplus B$	$A \oplus B \oplus B$

$$\left\{ \begin{array}{l} X \oplus X = 0 \\ X \oplus 0 = X \end{array} \right.$$

MAGIA XORNIANA

b

tiempo	código	a	b
0	a = A	A	
1	b = B	A	B
2	a = a ^ b	$A \oplus B$	B
3	b = a ^ b	$A \oplus B$	$A \oplus B \oplus B$
3		$A \oplus B$	A

$\left\{ \begin{array}{l} X \oplus X = 0 \\ X \oplus 0 = X \end{array} \right.$

MAGIA XORNIANA

b

tiempo	código	a	b
0	a = A	A	
1	b = B	A	B
2	a = a ^ b	$A \oplus B$	B
3	b = a ^ b	$A \oplus B$	$A \oplus B \oplus B$
3		$A \oplus B$	A
4	a = a ^ b	$A \oplus B \oplus A$	A

$$\left\{ \begin{array}{l} X \oplus X = 0 \\ X \oplus 0 = X \end{array} \right.$$

MAGIA XORNIANA

b

tiempo	código	a	b
0	a = A	A	
1	b = B	A	B
2	a = a ^ b	$A \oplus B$	B
3	b = a ^ b	$A \oplus B$	$A \oplus B \oplus B$
3		$A \oplus B$	A
4	a = a ^ b	$A \oplus B \oplus A$	A
4		$B \oplus A \oplus A$	A

$$\left\{ \begin{array}{l} X \oplus X = 0 \\ X \oplus 0 = X \end{array} \right.$$

MAGIA XORNIANA

b

tiempo	código	a	b
0	a = A	A	
1	b = B	A	B
2	a = a ^ b	$A \oplus B$	B
3	b = a ^ b	$A \oplus B$	$A \oplus B \oplus B$
3		$A \oplus B$	A
4	a = a ^ b	$A \oplus B \oplus A$	A
4		$B \oplus A \oplus A$	A
4		B	A

$\left\{ \begin{array}{l} X \oplus X = 0 \\ X \oplus 0 = X \end{array} \right.$

TA-NIA-NA-NIAAAAAA!

