

FileViewRunHelp

Slow

Fast

Animate:

Program flow

Format:

D...

View:

Co...

Chip Nam... XorTime : 0

Input pins

Name	Value
a	1
b	1

Output pins

Name	Value
out	0

HDL

```
// This file is part of www.nand2tetris.org
// and the book "The Elements of Computing Systems"
// by Nisan and Schocken, MIT Press
// File name: projects/1/Xor.hdl
/**
 * Exclusive-or gate:
 * if ((a and Not(b)) or (Not(a) and b)) then
 *   out = 1;
 * else
 *   out = 0;
 */
CHIP Xor {
    IN a, b;
    OUT out;

    PARTS:
        Not(in=a,out=nota);
        And(a=nota,b=b,out=t1);
        And(a=a,b=b,out=t2);
        Or(in=t1,in=t2,out=out);
}
```

Internal pins

Name	Value
nota	0
notb	0
t1	0
t2	0

a	b	out
0	0	0
0	1	1
1	0	1
1	1	0

End of script – Comparison ended successfully