

Hardware Simulator (2.5) - C:\Users\dande\Documents\CS 220\HW01\Not.hdl

File View Run Help

Chip Name: **Not** Time: 0

Input pins		Output pins	
Name	Value	Name	Value
in	1	out	0

HDL

```
CHIP Not {
  IN in;
  OUT out;

  PARTS:
    Nand(a=in, b=in, out=out);
}
```

Internal pins

Name	Value
------	-------

End of script - Comparison ended successfully

Hardware Simulator (2.5) - C:\Users\dande\Documents\CS 220\HW01\And.hdl

File View Run Help

Chip Name: **And** Time: 0

Input pins		Output pins	
Name	Value	Name	Value
a	1	out	1
b	1		

HDL

```
CHIP And {
  IN a, b;
  OUT out;

  PARTS:
    Nand(a=a, b=b, out=nand);
    Not(in=nand, out=out);
}
```

Internal pins

Name	Value
nand	0

End of script - Comparison ended successfully

Hardware Simulator (2.5) - C:\Users\dandel\Documents\CS 220\HW01\Or.hdl

File View Run Help

Chip Name: Or Time: 0

Input pins		Output pins	
Name	Value	Name	Value
a	1	out	1
b	1		

HDL

```
CHIP Or {
  IN a, b;
  OUT out;

  PARTS:
    Not(in=a, out=nota);
    Not(in=b, out=notb);
    And(a=nota, b=notb, out=notab);
    Not(in=notab, out=out);
}
```

Internal pins

Name	Value
nota	0
notb	0
notab	0

```
// This file is part of www.nand2tetrtris.org
// and the book "The Elements of Computing Systems"
// by Nisan and Schocken, MIT Press.
// File name: projects/01/Or.tst

load Or.hdl,
output-file Or.out,
compare-to Or.cmp,
output-list a%B3.1.3 b%B3.1.3 out%B3.1.3;

set a 0,
set b 0,
eval,
output;

set a 0,
set b 1,
eval,
output;

set a 1,
set b 0,
eval,
output;

set a 1,
set b 1,
eval,
output;
```

End of script - Comparison ended successfully

Hardware Simulator (2.5) - C:\Users\dandel\Documents\CS 220\HW01\Xor.hdl

File View Run Help

Chip Name: Xor Time: 0

Input pins		Output pins	
Name	Value	Name	Value
a	1	out	0
b	1		

HDL

```
CHIP Xor {
  IN a, b;
  OUT out;

  PARTS:
    Or(a=a, b=b, out=aorb);
    Nand(a=a, b=b, out=anandb);
    And(a=aorb, b=anandb, out=out);
}
```

Internal pins

Name	Value
aorb	1
anandb	0

```
// This file is part of www.nand2tetrtris.org
// and the book "The Elements of Computing Systems"
// by Nisan and Schocken, MIT Press.
// File name: projects/01/Xor.tst

load Xor.hdl,
output-file Xor.out,
compare-to Xor.cmp,
output-list a%B3.1.3 b%B3.1.3 out%B3.1.3;

set a 0,
set b 0,
eval,
output;

set a 0,
set b 1,
eval,
output;

set a 1,
set b 0,
eval,
output;

set a 1,
set b 1,
eval,
output;
```

End of script - Comparison ended successfully