HardwareSimulatorMain

Hardware Simulator (2.5) - /Users/mayurgupta/Desktop/nand2tetris/projects/02/HalfAdder.hdl

File   View   Run   Help

Animate: Format: View:
Program flow   D...   Scr...
Slow   Fast

Chip Nam... `HalfAdder`   Time : `0`

Input pins

Name	Value
a	1
b	1

Output pins

Name	Value
sum	0
carry	1

HDL

```
// File name: projects/02/HalfAd
/**
 * Computes the sum of two bits.
 */
CHIP HalfAdder {
    IN a, b;    // 1-bit inputs
    OUT sum,    // Right bit of
       carry;  // Left bit of a

    PARTS:
    //// Replace this comment wi
    And(a=a,b=b,out=carry);
    Xor(a=a,b=b,out=sum);
}
```

Internal pins

Name	Value

```
// 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/02/HalfAdder.tst

load HalfAdder.hdl,
output-file HalfAdder.out,
compare-to HalfAdder.cmp,
output-list a%B3.1.3 b%B3.1.3 sum%B3.1.3 carry%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