

```
`timescale 1ns / 1ps

////////////////////////////////////
////////////////////////////////////

// Company:
// Engineer:
//
// Create Date: 10/13/2020 11:14:19 PM
// Design Name:
// Module Name: 4-Bit_Adder
// Project Name:
// Target Devices:
// Tool Versions:
// Description:
//
// Dependencies:
//
// Revision:
// Revision 0.01 - File Created
// Additional Comments:
//
////////////////////////////////////
////////////////////////////////////

module Four_Bit_Adder(
    input c,
    input a0,
```

```
input b0,  
input a1,  
input b1,  
input a2,  
input b2,  
output s0,  
output s1,  
output s2,  
output s3  
);
```

```
wire t0, t1;
```

```
Full_Adder Adder1(.A(a0), .B(b0), .Cin(c),  
.S(s0), .Cout(t0));  
Full_Adder Adder2(.A(a1), .B(b1),  
.Cin(t0), .S(s1), .Cout(t1));  
Full_Adder Adder3(.A(a2), .B(b2),  
.Cin(t1), .S(s2), .Cout(s3));
```

```
endmodule
```