Quiz 1

Submitted By:
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2016201

//quiz.v

```
`timescale 1ns / 1ps
//////////////////////////////////////////////////////////////////////////////////
// Company:
// Engineer:
//
// Create Date: 08/21/2017 12:36:32 AM
// Design Name:
// Module Name: quiz
// Project Name:
// Target Devices:
// Tool Versions:
// Description:
//
// Dependencies:
//
// Revision:
// Revision 0.01 - File Created
// Additional Comments:
//
//////////////////////////////////////////////////////////////////////////////////


module quiz(
    input  a1,
    input  a2,
    input  a3,
    input  a4,
```

```
  input  b1,
  input  b2,
  input  b3,
  input  b4,
  output reg c,
  output reg d
  );

always@(*)
begin
if (a3 == 1 & b3 == 0)
begin
c=1;
d=0;
end
else if(b3 == 1 & a3 == 0)
begin
c=0;
d=1;
end
else if(a2 == 1 & b2 == 0)
begin
c=1;
d=0;
end
else if(a2 == 0 & b2 == 1)
begin
c=0;
d=1;
end
else if(a1 == 1 & b1 == 0)
begin
c=1;
```

```
 d=0;
 end
 else if(a1 == 0 & b1 == 1)
 begin
 c=0;
 d=1;
 end
 else if(a4 == 1 & b4 == 0)
 begin
 c=1;
 d=0;
 end
 else if(b4 == 1 & a4 == 0)
 begin
 c=0;
 d=1;
 end
 else
 begin
 c=1;
 d=1;
 end
 end

endmodule
```

//cons.xdc

```
set_property PACKAGE_PIN F22 [get_ports {a1}]
set_property IOSTANDARD LVCMOS33 [get_ports {a1}]
set_property PACKAGE_PIN G22 [get_ports {a2}]
set_property IOSTANDARD LVCMOS33 [get_ports {a2}]
set_property PACKAGE_PIN H22 [get_ports {a3}]
set_property IOSTANDARD LVCMOS33 [get_ports {a3}]
```

```
set_property PACKAGE_PIN F21 [get_ports {a4}]
set_property IOSTANDARD LVCMOS33 [get_ports {a4}]
set_property PACKAGE_PIN H19 [get_ports {b1}]
set_property IOSTANDARD LVCMOS33 [get_ports {b1}]
set_property PACKAGE_PIN H18 [get_ports {b2}]
set_property IOSTANDARD LVCMOS33 [get_ports {b2}]
set_property PACKAGE_PIN H17 [get_ports {b3}]
set_property IOSTANDARD LVCMOS33 [get_ports {b3}]
set_property PACKAGE_PIN M15 [get_ports {b4}]
set_property IOSTANDARD LVCMOS33 [get_ports {b4}]
set_property PACKAGE_PIN T22 [get_ports {d}]
set_property IOSTANDARD LVCMOS33 [get_ports {d}]
set_property PACKAGE_PIN U14 [get_ports {c}]
set_property IOSTANDARD LVCMOS33 [get_ports {c}]
```