

```
`timescale 1ns / 1ps
///////////////////////////////
// Company:
// Engineer:
//
// Create Date: 05/23/2022 07:56:13 PM
// Design Name:
// Module Name: frog
// Project Name:
// Target Devices:
// Tool Versions:
// Description:
//
// Dependencies:
//
// Revision:
// Revision 0.01 - File Created
// Additional Comments:
//
///////////////////////////////

module frog(
    input [10:0] Hpixel,
    input [10:0] Vpixel,
    input clk,
    input new_frame,
    input up,
    input down,
    input reset,
    output [15:0] position,
    output [3:0] frog
);

    countUD16L frogcount (.clk(clk), .Up(down & new_frame), .Dw(up & new_frame),
.LW(reset), .d(16'd232), .q(position));

    assign frog[3:0] = (Vpixel >= position) & (Vpixel <= (position + 11'd15)) &
(Hpixel >= 11'd120) & (Hpixel <= 11'd135) ? (4'hf) : 4'b0;

/*
// first get the frog to be at 120, 232
```

keep track of position of frog  
horizontal postion is not going to change = 120  
up three pixels per frame vertical  
output color rgb all three need to be true for it to be white which will be frog  
want it to be F when vpixel is between 232 and 247, and 120 to 135 hpixel  
247  
\*/  
endmodule