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C:/Users/dipjy/Desktop/verilog code/filter_tb.v
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```
timescale 1ns / 1ps
module tst;
// Inputs
reg clk;
reg rst;
reg [31:0] x;
// Outputs
wire [31:0] dataout;
// Instantiate the Unit Under Test (UUT)
filterfir uut (
.clk(clk),
.rst(rst),
.x(x),
.dataout(dataout)
);
initial clk = 0;
always begin #50 clk=~clk; end
initial begin
// Initialize Inputs
rst = 0;
x = 0;
#100;
rst = 1;
#100;
rst = 0;
x = 32'd5;
#100;
x = 32'd10;
#100;
x = 32'd12;
#100;
x = 32'd15;
#100;
x = 32'd16;
#100;
x=32'd0;
end
endmodule
```