module top(clk,rst,a,b,c,in,out,en\_ov,en\_zero);

input clk,rst;

input [7:0]a,b,c,in;

output [7:0]out;

output en\_ov,en\_zero;

wire [7:0]x,y,z;

wire [7:0]t1,t2,t3,temp;

wire cr,carryout;

variables p(clk,rst,in,x,y,z);

multi q(clk,rst,a,x,t1);//barrelshifter

multi r(clk,rst,b,y,t2);//barrelshifter

multi s(clk,rst,c,z,t3);//barrelshifter

setting t(clk,rst,3'b000,t1,t2,1'b0,temp,cr);//rca

setting u(clk,rst,3'b000,temp,t3,cr,out,carryout);//rca

cond v(clk,out,carryout,en\_ov,en\_zero);

endmodule