writeMem(3 , 16'b0001000000000101);

writeReg( 0, 11);

run( 3, 1);

readReg(0, out);

if(out == 16)

$display("----------------good addi1" );

else

$display("-----------------bad addi1" );

writeMem(4 , 16'b0001000100000001);

writeReg( 1, 16'h7fff);

run( 4, 1);

readReg(1, out);

if(out == 16'h8000)

$display("----------------good addi2" );

else

$display("-----------------bad addi2" );

writeMem(5, 16'b0011000011111111);

run(5,1);

readReg(0,out);

if(out == 16'hff00)

$display("----------------good lui1" );

else

$display("-----------------bad lui1" );

writeMem(5, 16'b0011000010101010);

run(5,1);

readReg(0,out);

if(out == 16'haa00)

$display("----------------good lui2" );

else

$display("-----------------bad lui2" );

writeMem(6, 16'b0111000111111111);

run(6,1);

readReg(1,out);

if(out == 16'hffff)

$display("----------------good cpi1" );

else

$display("-----------------bad cpi1" );

writeMem(6, 16'b0111000100000000);

run(6,1);

readReg(1,out);

if(out == 16'h0000)

$display("----------------good cpi2" );

else

$display("-----------------bad cpi2" );