library ieee;

USE ieee.std\_logic\_1164.all;

USE ieee.numeric\_std.all;

Entity alu\_test IS

END alu\_test;

Architecture behavior of alu\_test is

component alu is

port(

rx: in std\_logic\_vector(7 downto 0); -- input 1

ry: in std\_logic\_vector(7 downto 0); -- input 2

opcode: in std\_logic\_vector(3 downto 0); -- opcode in

sele: in std\_logic\_vector (3 downto 0); --select line

output: out std\_logic\_vector(7 downto 0) -- output

);

end component;

signal rx\_test : std\_logic\_vector (7 downto 0);

signal ry\_test: std\_logic\_vector (7 downto 0);

signal op\_test: std\_logic\_vector (3 downto 0);

signal sele\_test : std\_logic\_vector (3 downto 0);

signal output\_test: std\_logic\_vector (7 downto 0 );

signal branch\_test: std\_logic;

signal zero\_test: std\_logic;

begin

test: ALU

Port map(rx\_test,ry\_test,op\_test,sele\_test,output\_test);

test1: rx\_test<="00000010";

test2: ry\_test<="00000001";

test3: op\_test<="0000",

"0001" after 10 ps,

"0010" after 20 ps,

"0011" after 40 ps,

"0100" after 60 ps,

"0101" after 80 ps;

test4: sele\_test<="0000",

"0001" after 30 ps,

"0000" after 40 ps,

"0001" after 50 ps,

"0000" after 60 ps,

"0001" after 70 ps,

"0000" after 80 ps,

"0001" after 90 ps,

"0010" after 100 ps,

"0011" after 110 ps,

"0100" after 120 ps,

"0101" after 130 ps,

"0110" after 140 ps,

"0111" after 150 ps,

"1111" after 160 ps,

"1000" after 170 ps;

End Architecture;